

TOWN OF SURFSIDE
BUILDING & ZONING DEPARTMENT/ HOURS 9:00AM - 3:00PM
9293 HARDING AVENUE
SURFSIDE, FL 33154
(305)861-4863

Application Number 02-00000020 Date 10/25/01
Property Address 8777 GB COLLINS AVE
PARCEL NUMEER -0 -0 -0 /4 /NB2A
FOLIO NUMBER
Application description . . . ALTERATIONS AND REPAIRS
Property Zoning

| | |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Owner | Contractor |
| ----- | ----- |
| CHAMPLAIN TOWERS SOUTH CONDO. 8777 COLLINS AVENUE 1105 MR. NODA, PETER/LINDA SURFSIDE FL 33154 | AQUA SHIELD CORP. ATTN: SMITH ROBERT HALL III 2012 HARDING STREET HOLLYWOOD FL 33020 (305) 944-9911 |

----- Structure Information -----

Construction Type
Occupancy Type
Roof Type
Flood Zone AE AT 8 FEET
Sign Type
Fence Type

| | | | |
|---------------------|--------------------------------|--------------------|--------|
| Permit | ALTERATIONS AND REPAIRS | | |
| Additional desc . . | CONCRETE RESTORATIONS FOR BALC | | |
| Permit Fee | 2418.00 | Plan Check Fee . . | .00 |
| Issue Date | 10/25/01 | Valuation | 200000 |
| Expiration Date . . | 4/24/02 | | |

| Qty | Unit | Charge | Per | | Extension |
|--------|---------|--------|-------------------------|--|-----------|
| 1.00 | 30.0000 | EA | ALTERATIONS AND REPAIRS | | 30.00 |
| 199.00 | 12.0000 | EA | ALTERATIONS AND REPAIRS | | 2388.00 |

Special Notes and Comments
NO INSPECTION REQUEST WILL BE TAKEN
WITHOUT APPLICATION/PERMIT NUMBER

0094G/1-20-93/AE-8

Other Fees COUNTY PERMIT FEE 12.00

| Fee summary | Charged | Paid | Credited | Due |
|------------------|---------|---------|----------|-----|
| Permit Fee Total | 2418.00 | 2418.00 | .00 | .00 |
| Plan Check Total | .00 | .00 | .00 | .00 |
| Other Fee Total | 12.00 | 12.00 | .00 | .00 |
| Grand Total | 2430.00 | 2430.00 | .00 | .00 |

BUILDING DEPARTMENT CLERK: *[Signature]*

AUTHORIZED SIGNATURE: *[Signature]*

•

•

—

•

1

FF :

The above application is subject to the design sign-off and take action recommendations for preventing accidents and incidents. The application is subject to the terms and conditions of the permit issued subject to the terms and conditions of the permit issued by the Licensing Contractors.

[illegible]

Darlen - They need to Complete
Special Inspector form

| TOWN OF SUNSHINE | | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------------------|--------|---------------------------------------------------|-----------------|
| PERMIT APPLICATION ROUTING SHEET | | | | | |
| Date <u>10/4/01</u> | | Process No. <u>02-20</u> | | Application Type <u>Alt + Repair</u> | |
| Contractor <u>Agua School</u> | | Applicant <u>Chemplam Town</u> | | Flood Zone | |
| Property Address <u>8777 Collins Ave</u> | | | | | |
| All items are currently <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Contractor's Credentials Review State Certified <input checked="" type="checkbox"/> No (Check all items that are expired) State Lic <input checked="" type="checkbox"/> Date City Reg <input checked="" type="checkbox"/> Occ Lic <input checked="" type="checkbox"/> *W/L Inc <input checked="" type="checkbox"/> Prop/Lic <input checked="" type="checkbox"/> Date County Certified <input checked="" type="checkbox"/> Cert Comp <input checked="" type="checkbox"/> Occ Lic <input checked="" type="checkbox"/> Min Lic <input checked="" type="checkbox"/> W/L Inc <input checked="" type="checkbox"/> Prop/Lic <input checked="" type="checkbox"/> *State Reg <input checked="" type="checkbox"/> * If providing only an exemption certificate, a letter is required stating no employees and will be performing work * Applicable to certain categories only. | | | | | |
| Check Initials _____ | | Date _____ | | Comments <u>Spoke to Ag. pend. Occ. Lic pend.</u> | |
| Division | Approved | Date | Denied | Date | Division Review |
| Planning & Zoning | | | | | Comments |
| Structural Eng. | | | | | |
| Building Official | | | | | |
| Mechanical Inspector | | | | | |
| Electrical Inspector | | | | | |
| Plumbing Inspector | | | | | |
| Road/School Impact | | | | | |
| Demol | | | | | |
| Water/Sewer | | | | | |
| Metro-Fire Dept. | | | | | |
| Town Commission | | | | | |
| Public Works | | | | | |
| Landscaping | | | | | |
| Application Review & Fee Calculation PERMIT FEES Alteration / Repairs Glass Windows/Door Concrete Slabs Storm Shutters/Panels Awnings Demolition Plumbing Electrical Mechanical Landscaping | | | | | |
| OTHER FEES Madon Fee Date City Comp Structural Review Landscape Bond Out Out Bond Street Repair Bond Sewer Impact Fee Photocopies Fee Zoning Review Fee Specialty/Elect. | | | | | |

1) EXECUTE SPECIAL INSPECTOR FORM
 2) PROVIDE LIST OR SKETCH OF SCOPED WORK. I.E.: UNIT NUMBERS IN REPAIR.
 3) PROVIDE LETTER OR AFFIDAVIT FROM ASSOCIATION FOR WORK COMPLETED TO DATE & STATEMENT OF INSPECTION OR AFFIDAVIT FROM PREVIOUS P.E.

934-923-6630
 10/9/01 Faxd.

2430.00

**TOWN OF SURFSIDE
FLORIDA
APPLICATION FOR BUILDING PERMIT**

Application is hereby made for the approval of the detailed statement of the plans and specifications herewith submitted for the building or other structure herein described. This application is made in compliance and conformity with the Building Ordinance of the Town of Surfside, Florida. The approval of this plan or permit shall not be construed as applying to or changing in any way the restrictions contained in any deeds of conveyance, all provisions of the Laws of the State of Florida, all ordinances of the Town of Surfside, and all rules and regulations of the Building Department of the Town of Surfside shall be complied with whether herein specified on plans or not. I understand that separate permits are required for ELECTRICAL, PLUMBING and MECHANICAL work.

DATE 10-3-01 OWNER'S NAME CHAMPLAIN Towers South COVDO. ASSN.
JOB ADDRESS 8777 COLLINS AVENUE

LOT _____ BLOCK _____ SUBDIVISION _____
ARCHITECT/ENGINEER RAFAEL ROSAS, P.E., Ph.D., Cons. Eng. PHONE (305) 361-0236

ADDRESS 933 CRANDON BOULEVARD Key Biscayne STATE FL ZIP 33149

CONTRACTOR AQUA-SHIELD CORP. PHONE (305) 944-9911 or (954) 9236475

CC # CGC 057942 QUALIFIER'S NAME DAVID C. SCHULTHEIS

ADDRESS 3000 N. 28 TERRACE CITY HOLLYWOOD STATE FL ZIP 33020

DESCRIPTION OF PROPOSED WORK Concrete Restoration on balconies, as per specifications by RAFAEL ROSAS, P.E.

TYPE OF WORK ☐ REMODELING ☐ ADDITION ☒ REPAIRS BALCONIES

CURRENT USE: ☐ APARTMENT ☐ RESIDENCE ☐ COMMERCIAL

PROPOSED USE: ☐ APARTMENT ☐ RESIDENCE ☐ COMMERCIAL

IS THIS PROJECT SUBJECT TO A TOWN OR COUNTY IMPACT FEE: ☐ YES ☐ NO

Cubic 757 c.f. ESTIMATED COST OF IMPROVEMENTS \$ 200,000⁰⁰

I hereby submit all the plans and specifications for said building. I hereby make application for a Certificate of Occupancy. All notices with reference to the building and its construction may be sent to:

The undersigned applicant for this building permit does hereby certify that they understand and accept their obligations as an employer of labor under the Florida Workers' Compensation Act, being Section 5966, compiled General laws of Florida, Permanent Supplement, and has complied with the provisions hereof, and will require similar compliance from all contractors and subcontractors employed by them in the work to be performed under this permit; and will post or cause to be posted for inspection on the site of the work such public notice or notices as are required by this.

SIGNED [Signature]
ADDRESS 3000 N. 28 Terrace, Hollywood, FL 33020

NOTICE OF COMMENCEMENT

OWNERS AFFIDAVIT: I certify that all the foregoing is accurate and that all work will be done in compliance with all applicable laws regulating construction and zoning.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

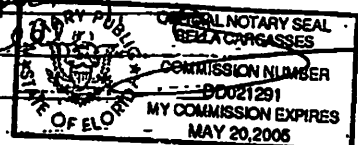
AGENT
SIGNATURE OF OWNER [Signature] PRINT NAME RICHARD A. FRAU

SIGNATURE OF CONTRACTOR [Signature] PRINT NAME DAVID SCHULTHEIS, D.P.

Date October 4, 2001 Date October 3, 2001

NOTARY as to Owner [Signature] NOTARY as to Contractor [Signature]

My Commission Expires: Apr. 20, 2003 My Commission Expires: May 20, 2005





TOWN OF SURFSIDE

MUNICIPAL BUILDING
9293 HARDING AVENUE
SURFSIDE, FLORIDA 33154

Telephone: (305) 861-4863
Facsimile: (305) 861-1302

Web Site: www.town.surfside.fl.us
clerk@town.surfside.fl.us

SPECIAL INSPECTOR

DATE: 10/11/01

ATTN: Building Official

I, the undersigned, a Professional Engineer ☒, Registered Architect ☐, registered in the State of Florida, have been retained by the owners, CHAMPAIN TOWERS SOUTH of the property located at: 8777 COLLINS AVE SURFSIDE to perform all the duties of a Special Inspector, as defined in Section 305.3 of the South Florida Building Code.

This office will be responsible to the Building Official of the Town of Surfside for the inspection of the structural elements of the building, including all excavations, pilings, foundation, all reinforced concrete and structural steel, and will file written weekly reports for the same as to progress, compliance or non-compliance with the plans and the South Florida Building Code. In the event of non-compliance the Building Official shall be notified immediately so that appropriate action can be taken. The pile logs and all concrete test reports will be submitted to the Building Official within one week after their completion.

Upon completion of the structure, I will submit to the Town of Surfside a certificate of compliance with the South Florida Building Code and approved plans.

Engineer's Signature: Richard A. Paul

LICENSE NUMBER: PE 31865

Building Permit #: #02-20

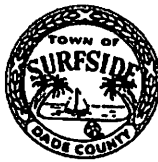
Owner/Agent Signataure: Richard A. Paul

Owner/Agent Name (Printed): Richard A. Paul

BUILDING DEPARTMENT, Accepted by: [Signature]

Date: 10/15/01

MUST BEAR ENGINEER/ARCHITECT ORIGINAL SIGNATURE AND RAISED SEAL!!!



02-20

TOWN OF SURFSIDE

MUNICIPAL BUILDING
9293 HARDING AVENUE
SURFSIDE, FLORIDA 33154

Telephone: (305) 861-4863
Facsimile: (305) 861-1302

Web Site: www.town.surfside.fl.us
clerk@town.surfside.fl.us

SPECIAL INSPECTOR

DATE: 3/20/02

ATTN: Building Official

I, the undersigned, a Professional Engineer X, Registered Architect _____, registered in the State of Florida, have been retained by the owners, _____ of the property located at: 8777 COLLINS AVENUE, SURFSIDE, FLORIDA 33154 to perform all the duties of a Special Inspector, as defined in Section 305.3 of the South Florida Building Code.

This office will be responsible to the Building Official of the Town of Surfside for the inspection of the structural elements of the building, including all excavations, pilings, foundation, all reinforced concrete and structural steel, and will file written weekly reports for the same as to progress, compliance or non-compliance with the plans and the South Florida Building Code. In the event of non-compliance the Building Official shall be notified immediately so that appropriate action can be taken. The pile logs and all concrete test reports will be submitted to the Building Official within one week after their completion.

Upon completion of the structure, I will submit to the Town of Surfside a certificate of compliance with the South Florida Building Code and approved plans.

Engineer's Signature: Timothy D. Hurl

LICENSE NUMBER: 41992

Building Permit #: 02-20

Owner/Agent Signataure: _____

Owner/Agent Name (Printed): Nancy K. Levin, President

BUILDING DEPARTMENT, Accepted by: Nancy Levin

Date: 3/21/02

MUST BEAR ENGINEER/ARCHITECT ORIGINAL SIGNATURE AND RAISED SEAL!!!!

SCOPE OF WORK AND/OR TYPE OF INSPECTION TO BE DONE:

INSTRUCTION FOR SPECIAL INSPECTORS

1. A Special Inspector and a Threshold Special Inspector are each private professionals who are working for and with the consent of the Building Official.
2. No matter who is paying the bills, when it comes to the inspections to be made, only the requirements of the code, the Building Official and your own expertise and experience should be considered.
3. As an inspector you (the Special Inspector) are present to observe and to reach one of the three possible conclusions:
 - a) "This is correct", it is in close compliance the approved drawings and the code.
 - b) "This is not correct", it is not close compliance etc.
 - c) "No decision can be made" usually due to insufficient information, the following is needed.
4. Inspections are made on an as required basis, the only exception to this is threshold buildings which require by law that all work of structural nature be inspected by a Threshold Certified Special Inspector on a continuous basis. As a special inspector you must remind the contractor that he/she still has a responsibility to notify the Cities building and trade inspectors of all mandatory inspections so that they can perform a complimentary inspection desired.
5. A written report is required for each day of inspection on each project. This report will list inspection made and conclusions reached. If any action is taken, said action will be detailed. If any item of inspection is "not approved" or any other problem is perceived, it shall be presented to the Building Official as part of the inspection report. All problems and failures reported must be followed up in subsequent reports detailing what actions were taken to correct deficiencies.
6. Copies of all field reports and such other information as shall be necessary to specify the "condition" of the structure under construction shall be kept on the job site as an inspection log. Signed and sealed copies of all field reports, and such other information as is necessary shall be submitted at regular intervals not to exceed ten (10) working days. The Special Inspector will make himself/herself available should the Building Official require additional information.
7. As a special inspector, you have a great responsibility to help preserve the public safety. All dangerous conditions must be reported in writing to the Building Official as quickly as possible, conditions which are immediately dangerous will require further action. Common sense will be required in determining a proper response to any situation.

SPECIAL INSPECTORS:

THE FOLLOWING ARE THE ONLY JOBS FOR WHICH A SPECIAL INSPECTOR WILL BE PERMITTED IN THE TOWN OF SURFSIDE:

- 1. FOR PILE INSTALLATION, A SPECIAL INSPECTOR WILL BE REQUIRED, AND MUST BE A SOIL ENGINEER, PREFERABLY THE SAME SOIL ENGINEER THAT COMPLETED THE SOIL INVESTIGATION FOR THE PARTICULAR PROJECT.**
- 2. FOR THRESHOLD BUILDINGS ONLY, A SPECIAL INSPECTOR IS REQUIRED BY STATE LAW.**
- 3. FOR GLAZING ON THRESHOLD BUILDINGS, A SPECIAL INSPECTOR WILL BE REQUIRED. IT MAY BE THE SAME THRESHOLD INSPECTOR.**
- 4. FOR GUNITE TYPE CONCRETE REPAIRS AND RESTORATION, A SPECIAL INSPECTOR WILL BE REQUIRED.**
- 5. FOR REINFORCED MASONRY, AS PER THE SOUTH FLORIDA BUILDING CODE, A SPECIAL INSPECTOR WILL BE REQUIRED.**
- 6. FOR SPECIAL EVENTS, WHERE TENTS, STAGES, ETC... ARE USED, A SPECIAL INSPECTOR WILL BE REQUIRED.**
- 7. FOR VERY SPECIAL CASES, AS PERMITTED BY THE BUILDING OFFICIAL, DUE TO THE EXTREMELY SPECIAL NATURE OF THE WORK. MUST BE REQUESTED DIRECTLY FROM THE BUILDING OFFICIAL AND MAY ONLY BE APPROVED BY THE BUILDING OFFICIAL.**

NO EXCEPTIONS. IF YOU COMPLETE WORK WITH A SPECIAL INSPECTOR AND IT IS NOT APPROVED AS STATED ABOVE, YOU WILL BE REQUIRED TO UNCOVER ALL OF THE WORK IN ORDER FOR IT TO BE INSPECTED.

**DANIEL B. NIEDA, R.A.
BUILDING OFFICIAL**



A. T. DESIGNS, INC.

CIVIL / STRUCTURAL ENGINEERING AND ENVIRONMENTAL SERVICES

March 20, 2002

**Mr. Daniel B. Nieda, R.A., Building Official
TOWN OF SURFSIDE
BUILDING DEPARTMENT
9293 Harding Place
Surfside, Florida 33154**

**Re: Balcony Restoration and Waterproofing
Champlain Tower Condominium
8777 Collins Ave.
Miami Beach, FL 33154
Permit Number: 02-20**

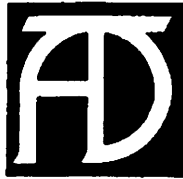
Dear Mr. Nieda,

The ongoing concrete restoration work being performed by Aqua-Shield Corporation, to the above mentioned unit balconies, has been ongoing since November 2001. As a result of the request for changing of the present engineer of record, I, Timothy S. Marshall, PE, will replace Rafael Rojas, PE to oversee the remaining concrete restoration work to the unit balconies. Complete and comprehensive repair and restoration specifications have been prepared at the request of your office. Signed and sealed copies of the project specifications have been included with this letter.

The portion of work completed under the supervision of the previous engineer of record has been certified and a copy of that certification has also been included with this letter. The areas of ongoing restoration, which have not been certified to date, shall be inspected and certified under our supervision. The previously completed and certified restoration work includes stacks 01 and 02. The areas of ongoing work are to stacks 03, 04, and 12. Some of the areas in 03 and 04 stack still required additional remedial restoration procedures performed, which shall be completed under my supervision.

The procedure(s) for the completion of the remaining portion of restoration work are as follows:

1. All areas of deterioration shall be identified and marked out by the Engineer.
2. Those areas shall be excavated (chipped), down to the oxidized steel reinforcement. The perimeter of the areas shall be saw cut to prevent any feathered edges. Once completed it shall be inspected.



3. The exposure of the deteriorated steel reinforcement shall extend until clean reinforcement is exposed. If there are cases where the chasing of the oxidized steel reinforcement is prohibited, sacrificial zinc anode shall be incorporated into the repair to arrest the continuation of the deterioration of the steel reinforcement.
4. In the case where there is minimal concrete coverage over the reinforcement bars, alternative measure shall be taken to insure the prolong protection of the steel reinforcement.
5. The exposed reinforcement shall then be sand blasted and coated with an anti-corrosion/bonding agent. Prior to the placement of the coating materials, the prepared steel shall be inspected.
6. The approved repair mortars will then be placed in the prepared areas and cured in accordance with manufacturers recommendations and industry standards. The engineer shall be present during the placement of the repair mortars, in accordance with Florida Status.
7. The finish surfaces will then receive an application of a migrating corrosion inhibitor (MCI) to prevent future deterioration of the concrete and steel reinforcement.

The work on the 03, 04, and 12 stacks shall be completed immediately and then the focus will move to the poolside stacks (09, 10, and 11). Once completed the remaining balconies shall be will be repaired. The inspection procedures outlined by the Town of Surfside Building Department shall be strictly followed and a log of our inspections will be kept current. An addition to the inspection log, we shall submit bi-weekly certification letter, along with our field inspection reports.

I fully understand the issues related to the completion of the previous concrete restoration work and will work diligently to complete the remaining work. Please contact our office should there be any further questions.

Respectfully submitted,
A.T. Designs, Inc.

Timothy S. Marshall, PE
Florida Reg. No. 41992

cc Nancy Levin, President
Steve Lesser, Becker & Poliakoff
Dave Schulteis, Aqua-Shield Corp.
File



TOWN OF SURFSIDE

MUNICIPAL BUILDING
9293 HARDING AVENUE
SURFSIDE, FLORIDA 33154

Telephone: (305) 861-4863
Facsimile: (305) 861-1302

Web Site: www.town.surfside.fl.us
tclerk@town.surfside.fl.us

SPECIAL INSPECTOR

DATE: 3/20/02

ATTN: Building Official

I, the undersigned, a Professional Engineer X, Registered Architect _____, registered in the State of Florida, have been retained by the owners, _____ of the property located at: 8777 COLLINS AVENUE, SURFSIDE, FLORIDA 33154 to perform all the duties of a Special Inspector, as defined in Section 305.3 of the South Florida Building Code.

This office will be responsible to the Building Official of the Town of Surfside for the inspection of the structural elements of the building, including all excavations, pilings, foundation, all reinforced concrete and structural steel, and will file written weekly reports for the same as to progress, compliance or non-compliance with the plans and the South Florida Building Code. In the event of non-compliance the Building Official shall be notified immediately so that appropriate action can be taken. The pile logs and all concrete test reports will be submitted to the Building Official within one week after their completion.

Upon completion of the structure, I will submit to the Town of Surfside a certificate of compliance with the South Florida Building Code and approved plans.

Engineer's Signature: Timothy D. Hill

LICENSE NUMBER: 41992

Building Permit #: 02-20

Owner/Agent Signataure: _____

Owner/Agent Name (Printed): NANCY K. LEVIN, PRESIDENT

BUILDING DEPARTMENT, Accepted by: Nancy Levin

Date: 3/21/02

MUST BEAR ENGINEER/ARCHITECT ORIGINAL SIGNATURE AND RAISED SEAL!!!!

SCOPE OF WORK AND/OR TYPE OF INSPECTION TO BE DONE:

INSTRUCTION FOR SPECIAL INSPECTORS

1. A Special Inspector and a Threshold Special Inspector are each private professionals who are working for and with the consent of the Building Official.
2. No matter who is paying the bills, when it comes to the inspections to be made, only the requirements of the code, the Building Official and your own expertise and experience should be considered.
3. As an inspector you (the Special Inspector) are present to observe and to reach one of the three possible conclusions:
 - a) "This is correct", it is in close compliance the approved drawings and the code.
 - b) "This is not correct", it is not close compliance etc.
 - c) "No decision can be made" usually due to insufficient information, the following is needed.
4. Inspections are made on an as required basis, the only exception to this is threshold buildings which require by law that all work of structural nature be inspected by a Threshold Certified Special Inspector on a continuous basis. As a special inspector you must remind the contractor that he/she still has a responsibility to notify the Cities building and trade inspectors of all mandatory inspections so that they can perform a complimentary inspection desired.
5. A written report is required for each day of inspection on each project. This report will list inspection made and conclusions reached. If any action is taken, said action will be detailed. If any item of inspection is "not approved" or any other problem is perceived, it shall be presented to the Building Official as part of the inspection report. All problems and failures reported must be followed up in subsequent reports detailing what actions were taken to correct deficiencies.
6. Copies of all field reports and such other information as shall be necessary to specify the "condition" of the structure under construction shall be kept on the job site as an inspection log. Signed and sealed copies of all field reports, and such other information as is necessary shall be submitted at regular intervals not to exceed ten (10) working days. The Special Inspector will make himself/herself available should the Building Official require additional information.
7. As a special inspector, you have a great responsibility to help preserve the public safety. All dangerous conditions must be reported in writing to the Building Official as quickly as possible, conditions which are immediately dangerous will require further action. Common sense will be required in determining a proper response to any situation.

SPECIAL INSPECTORS:

THE FOLLOWING ARE THE ONLY JOBS FOR WHICH A SPECIAL INSPECTOR WILL BE PERMITTED IN THE TOWN OF SURFSIDE:

- 1. FOR PILE INSTALLATION, A SPECIAL INSPECTOR WILL BE REQUIRED, AND MUST BE A SOIL ENGINEER, PREFERABLY THE SAME SOIL ENGINEER THAT COMPLETED THE SOIL INVESTIGATION FOR THE PARTICULAR PROJECT.**
- 2. FOR THRESHOLD BUILDINGS ONLY, A SPECIAL INSPECTOR IS REQUIRED BY STATE LAW.**
- 3. FOR GLAZING ON THRESHOLD BUILDINGS, A SPECIAL INSPECTOR WILL BE REQUIRED. IT MAY BE THE SAME THRESHOLD INSPECTOR.**
- 4. FOR GUNITE TYPE CONCRETE REPAIRS AND RESTORATION, A SPECIAL INSPECTOR WILL BE REQUIRED.**
- 5. FOR REINFORCED MASONRY, AS PER THE SOUTH FLORIDA BUILDING CODE, A SPECIAL INSPECTOR WILL BE REQUIRED.**
- 6. FOR SPECIAL EVENTS, WHERE TENTS, STAGES, ETC... ARE USED, A SPECIAL INSPECTOR WILL BE REQUIRED.**
- 7. FOR VERY SPECIAL CASES, AS PERMITTED BY THE BUILDING OFFICIAL, DUE TO THE EXTREMELY SPECIAL NATURE OF THE WORK. MUST BE REQUESTED DIRECTLY FROM THE BUILDING OFFICIAL AND MAY ONLY BE APPROVED BY THE BUILDING OFFICIAL.**

NO EXCEPTIONS. IF YOU COMPLETE WORK WITH A SPECIAL INSPECTOR AND IT IS NOT APPROVED AS STATED ABOVE, YOU WILL BE REQUIRED TO UNCOVER ALL OF THE WORK IN ORDER FOR IT TO BE INSPECTED.

**DANIEL B. NIEDA, R.A.
BUILDING OFFICIAL**



A. T. DESIGNS, INC.

CIVIL / STRUCTURAL ENGINEERING AND ENVIRONMENTAL SERVICES

January 28, 2003

Mr. Daniel B. Nieda, R. A., Building Official
TOWN OF SURFSIDE
BUILDING DEPARTMENT
9293 Harding Place
Surfside, Florida 33154

*File away
OK 1/2/03*

Re: Balcony Restoration and Waterproofing
Champlain Tower Condominium
8777 Collins Ave.
Miami Beach, FL 33154
Permit Number: 02-20

*Lot 0 Blk 4
NB2A*

Dear Mr. Nieda,

The concrete restoration work permitted through your office has been completed. Periodic inspections were conducted to observe the work in progress and to assure plan and specification adherence.

Based upon the on-site inspections of the restoration work observed, I hereby certify that the scope of the work was completed in substantial conformance with the permitted plans and specifications. Included are copies of the inspection reports. Please contact our office should there be any further questions.

Respectfully submitted,
A. T. Designs, Inc.

Timothy S. Marshall
1/22/03
Timothy S. Marshall, PE
Florida Reg. No. 41992

Permit No. 02-20

cc Champlain Towers
Aqua Shield
File



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
MIAMI BEACH
BALCONY, REPAIRS

| | | | |
|--------------------------------------------|--|------------|--------------------|
| DATE <u>1-9-03</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWERS</u> | | | |
| LOCATION <u>MIAMI BEACH</u> | | | |
| CONTRACTOR <u>AQUA SHIELD</u> | | OWNER | |
| WEATHER <u>SUNNY</u> | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE <u>ALLEN - AQUASHIELD</u> | | | |
| <u>JOHN - AT DESIGN</u> | | | |
| <u>MANAGER AND BOARD MEMBERS</u> | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT

REPLACE RAILS SOUTH EAST CORNER POOL AREA AND NORTH EAST SECTION.
REMOVE DEBRIS FROM PLANTER NEXT TO SHOWER.
REPAIR HOLES OVER SLIDING GLASS DOORS EAST FACING GROUND LEVEL.
REMOVE SCREW AND WIRE WEST WALL GROUND LEVEL UNIT 101
PRESSURE WASH PAVERS TO CLEAN PAINT SPOTS.
REPAIR AROUND SPRINKLER HEADS IN DRIVEWAY AREA.
FIX CORNER OF PLANTER ON POOL DECK IN FRONT UNIT 111
SOUTH EAST CORNER DRIVEWAY SIDE RAILS NOT PAINTED
CHECK ALL PLANTERS AROUND DRIVEWAY FOR PAINT TOUCH UP.
PAINT UPPER INSIDE EDGE OF PLANTERS (CHECK ALL)
TOUCH UP PAINT PARKING RAMP AREA ON SIDE WALLS
TOUCH UP PAINT UNDER STAIRS ON ROOF.
TOUCH UP BALCONY EDGE UNIT 307.
CHECK EAST PLANTED PAINT PEELING.
FILL HOLES PLANTER WALL. (SEE MANAGER)
CHECK ELECTRICAL EAST SIDE PLANTERS.

GENERAL NOTES: UNIT 204 CHECK UNEVEN SLAB, SCREWS, CAULKING.
UNIT 908 TINT ON SLIDING GLASS DOOR SAND BLATED

COPIES TO

AQUA SHIELD

CHAMPLAIN TOWERS

FIELD REPORT

SIGNATURE

1/27/03



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

BALCONY REPAIRS

| | | | |
|---------------------------------|--|--------------------------|--|
| DATE 12-3-02 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION SURF SIDE | | | |
| CONTRACTOR AQUA SHIELD | | OWNER | |
| WEATHER CLOUDY | | TEMP. ° at AM ° at PM | |
| IN ATTENDANCE JOHN / RICHARD | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACK 6 AND 5

1206 DOOR EDGE, RAIL REPAIR SOUTH BOTTOM, CHECK PAINT TOUCH UP ON EYE BROW EDGE

1106 DOOR EDGE, INSTALL SCREENS,

1006 OK

906 OK

806 OK

106 ~~OK~~ WALL PAINT ON RAIL

606 DOOR EDGE

606 CLEAN SLIDING GLASS WINDOWS

406 OK

306 OK

206 OK

STACKS 5, 6, 7, 8 NEED TO BE COMPLETED BY 12-6-02

LAND SCRAPING WILL BEGIN ON MONDAY

UNIT 508 HAS WINDOWS NEEDING REPLACEMENT BECAUSE OF SAND BLASTING

GENERAL NOTES: MANAGER HAS LIST WELD REPAIRS

COPIES TO

CHAMPLAIN TOWERS

AQUA SHIELD

SURF SIDE

FIELD REPORT

[Signature]

[Signature]
1/27/03

SIGNATURE



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
BALCONY REPAIRS

| | |
|----------------------------------------|--------------------------|
| DATE <u>12-3-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>ARVA SHIELD</u> | OWNER |
| WEATHER <u>CLOUDY</u> | TEMP. ° at AM ° at PM |
| IN ATTENDANCE <u>JOHN / RICHARD</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACKS 6 AND 5 A+B

11205 REMOVE PAINT ON SHUTTERS, CHECK WALL PAINT AROUND SHUTTERS, PAINT REPAIR
1105 OK

1005 CHECK SOUTH WEST SLIDING GLASS DOOR FRAME. 1005 B CHECK CAULKING
AROUND SLIDERS, DOOR EDGE

905 OK

805 A OK 805 B PAINT ON GLASS, DOOR EDGE

705 OK

605 OK

505 DOOR EDGE ON A AND B

405 NO KEY

305 SLIDING GLASS DOOR FRAME SAND AND PAINT BOTH A+B


205 DOOR EDGE AND HAND RAIL ON B BALCONY, CHECK PAINT ON GLASS

GARAGE EXHAUST DUCTS NEED TO BE PAINTED

RAILS ON EAST END POOL NEED TO BE REPLACED, RAILS ON NORTH/EAST
CORNER NEED TO BE FIXED AND RAILS REPLACED ON STACK 8 UNEVEN
AND NOT SECURED PROPERLY

GENERAL NOTES: MANAGER HAS LIST OF WELD REPAIRS

COPIES TO CHAMPLAIN TOWERS
ARVA SHIELD
SURF SIDE

FIELD REPORT

1/27/03
SIGNATURE



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

BALCONY REPAIRS

| | | | |
|------------------------------------|--|------------|---------|
| DATE <u>11/27/02</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWERS</u> | | | |
| LOCATION <u>SURF SIDE</u> | | | |
| CONTRACTOR <u>AQUA SHIELD</u> | | OWNER | |
| WEATHER <u>SUNNY</u> | | TEMP. | " at AM |
| IN ATTENDANCE | | | " at PM |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACK 7

1207 DOOR EDGE

1107 KIA

1007 CORNER CHIPPER SOUTH SLIDING GLASS DOOR, DOOR EDGE

907 OK

807 CLEAN BALCONY FLOOR, TOUCH UP PAINT UPPER SHUTTER RAIL SOUTH SIDE
DOOR EDGE

707 CLEAN FLOOR, DOOR EDGE, CHECK CHUCKING AROUND ^{BOTH} ~~WHEEL~~ SLIDER

607 DOOR EDGE, CLEAN BALCONY FLOOR

507 SCREENS DAMAGED, CLEAN BALCONY FLOOR, REPAIR WALL CORNER NORTH SLIDING
GLASS DOOR

407 CLEAN BALCONY FLOOR, DOOR EDGE

307 CLEAN BALCONY FLOOR, DOOR EDGE, PATCH HOLE UPPER SOUTH CORNER SUPER

207 CEILING EDGE SOUTH SIDE, CLEAN FLOOR, DOOR EDGE

GENERAL NOTES:

COPIES TO

CHAMPLAIN TOWER

AQUA SHIELD

SURF SIDE

FIELD REPORT

[Signature]

1/27/03

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
MIAMI BEACH
BALCONY PUNCH OUT

| | | | |
|----------------------------------------|--|------------|--------------------|
| DATE <u>11-13-02</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWERS</u> | | | |
| LOCATION <u>MIAMI BEACH</u> | | | |
| CONTRACTOR <u>AQUA SHIELD</u> | | OWNER | |
| WEATHER <u>RAIN</u> | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE <u>RICHARD / JOHN</u> | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT

STACK 1

1201 DOOR EDGE NEEDS TO BE PAINTED

1101 DOOR EDGE

1001 DOOR EDGE

901 OK

801 DOOR EDGE

701 DOOR EDGE, WALL TAKEN UP EAST FACE.

601 DOOR EDGE

501 DOOR EDGE

401 OK

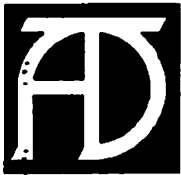
301 RAIL POST POCKETS (4) DOOR EDGE

101 DOOR EDGE

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD
SURF SIDE

FIELD REPORT
[Signature]
1/27/03
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

BALCONY REPAIRS

| | | | |
|-----------------------------|--|---------------|--|
| DATE 11-25-02 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION SURF SIDE | | | |
| CONTRACTOR AQUA SHIELD | | OWNER | |
| WEATHER SUNNY | | TEMP. ° at AM | |
| IN ATTENDANCE | | ° at PM | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STAIRS

1208 OK

1108 MIDDLE SOUTH SLIDER CASES ROUGH PAINT AROUND HANDLE, DOOR EDGE

1008 DOOR EDGE

908 RAILING UNEVEN AND NOT SECURED COMPLETELY; CEILING EDGE REPAIR NORTH CORNER

808 RAILING UNEVEN AND IN NEED OF REPAIRS, DOOR EDGE NOT PAINTED

708 RAILING IN NEED OF REPAIRS, DOOR EDGES NEED PAINTING

608 CLEAN BALCONY FLOOR, CHECK CEILING PAINT PEELING EAST LIGHT AREA, ONE RAIL POST
POCKET 6TH FROM NORTH EDGE, DOOR EDGE

508 DOOR EDGE CLEAN BALCONY FLOOR

408 DOOR EDGE, REPAIR EDGE NORTH CORNER NEAR WALL

308 DOOR EDGE, CLEAN FLOOR

208 DOOR EDGE,

*NOTE 908 HOLE EDGE OF FLOOR NORTH CORNER

1207 DOOR EDGE

GENERAL NOTES:

COPIES TO

CHAMPLAIN TOWERS

AQUA SHIELD
SURF SIDE

FIELD REPORT

Signature: *[Handwritten Signature]*
1/2 7/03
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
MIAMI BEACH
BALCONY REPAIRS

| | | | |
|-------------------------------------------------|--|------------|---------|
| DATE <u>11-18-02</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWERS</u> | | | |
| LOCATION <u>MIAMI BEACH</u> | | | |
| CONTRACTOR <u>AQUA SHIELD</u> | | OWNER | |
| WEATHER <u>SUNNY</u> | | TEMP. | ° at AM |
| IN ATTENDANCE <u>JOHN / RICHARD</u> | | | ° at PM |
| FOREMEN / WORKMEN <u>FOREMEN / 3 WORKMEN</u> | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

POUCH OUT STACK 10


1210 TOUCH UP CEILING, DOOR EDGE
1110 DOOR EDGE, CLEAN WINDOWS, TOUCH UP CEILING (PATCHES) WINDOW SHUTTER TRACKS
1010 DOOR EDGE, CLEAN WINDOWS AND WINDOW SHUTTER TRACKS
910 DOOR EDGE, CLEAN WINDOWS
810 DOOR EDGE CLEAN WINDOWS
710 DOOR EDGE, TOUCH UP TOP TRACK EDGE, CLEAN WINDOWS
610 DOOR EDGE, CLEAN WINDOWS TOP SHUTTERS
510 CLEAN WINDOWS AND SHUTTERS, PAINT GREEN CORNER, DOOR EDGE
410 CLEAN WINDOWS, DOOR EDGE
310 CLEAN WINDOWS, DOOR EDGE
210 CLEAN WINDOWS, DOOR EDGE

1312 ~~ONE~~ WELD REPAIRS (3) FOR WELDER ONLY

WORKMEN HAVE MOVED LIFT TO STACKS 7 AND 8.

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATION

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD

FIELD REPORT

SIGNATURE Timothy S. Hill
#27403



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPAIN TOWERS

MIAMI BEACH

| | |
|----------------------------|--------------------------|
| DATE 1-15-07 | PERMIT NO. |
| PROJECT CHAMPAIN | |
| LOCATION MIAMI BEACH | |
| CONTRACTOR AGUIA SHIELD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

STACK 9

309 DOOR EDGE TOUCH UP WITH NORTH CORNER AT CORNER HANG
TOUCH UP CORNER HANG SOUTH/WEST
109 TOUCH UP NORTH SIDE UPPER SHUTTER TRACK, UPPER PART SOUTH RAILING
EDGE TOUCH UP DOOR FRAME MIDDLE SHUTTER
109 RAIL POST BRACKET (1) TOUCH UP NORTH SIDE CORNER, DOOR EDGE
909 CHECK ALL SHUTTERS FOR PAINT, CEILING PATCH AND PAINT
209 OK
709 TOUCH UP PAINT ALL SHUTTERS (UPPER TRACK)
309 RAIL POST BRACKET (2) TOUCH UP TOP SOUTH CORNER SLIDER
509 RAIL POST BRACKET (3) TOUCH UP PAINT ALL SHUTTERS
409 DOOR EDGE
109 OK DOOR EDGE
209 DOOR EDGE

GENERAL NOTES:

COPIES TO

CHAMPAIN TOWERS

AGUIA SHIELD

FIELD REPORT
Signature: [Handwritten Signature]
4/2/07
SIGNATURE



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWER
MIAMI BEACH

| | | | |
|-----------------------------------|--|------------|---------|
| DATE <u>11-15-22</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWER</u> | | | |
| LOCATION <u>MIAMI</u> | | | |
| CONTRACTOR <u>ADVA SHIELD</u> | | OWNER | |
| WEATHER <u>SUNNY</u> | | TEMP. | ° at AM |
| IN ATTENDANCE | | ° at PM | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH LIST STAIR 1A

1211 RAIL POST DET (17)

11 NO KEY

11 NO KEY

911 NO R LUGS

811 DOWN EDGE

711 OK

611 NO R LUGS

511 NO KEY

411 TOUCH UP WALL PAINT ON RAIL. NO EDGE

311 NO R LUGS, BACK GLASS FOR PAINT

211 NO R LUGS

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS
ADVA SHIELD

FIELD REPORT

ADVA Trinity S. Hill

SIGNATURE 062769



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|---------------------------------|--|------------|--------------------|
| DATE 11-13-08 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION MIAMI BEACH | | | |
| CONTRACTOR AQUA SHIELD | | OWNER | |
| WEATHER RAIN | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE RICHARD / JOHN | | | |
| | | | |
| | | | |

TO: CHAMPLAIN TOWERS
MIAMI BEACH
BALCONY PUNCH OUT

OBSERVATIONS AND/OR WORK IN PROGRESS:

STACK 12

1212 DOOR EDGE PAINT
1112 RAIL POST POCKET (3) DOOR EDGE CLEAN MIDDLE SOUTH FACING DOOR GLASS
1012 RAIL POST (1) DOOR EDGE
912 RAIL POST (1) DOOR EDGE
812 DOOR EDGE TOUCH UP WALL PAINT SOUTH / EAST SLIDING GLASS DOOR STILL GREEN
712 RAIL POST POCKET (1) REMOVE TIE WIRE LOWER RAIL POST MARKED WITH ORANGE PAINT
612 RAIL POST POCKETS (6) EDGE DOORS
512 DOOR EDGE
412 RAIL POST POCKET (1)
312 REPAIR WALL TO BALCONY (3) SEAM EAST FACE, DOOR EDGES

WORKMEN DOING PUNCH OUT ON STACK 11.

WORKMEN HAVE STARTED PAINTING DRIVEWAY

GENERAL NOTES: 212 NA 10 WORKMEN ON SITE

COPIES TO CHAMPLAIN TOWERS

AQUA SHIELD
SURF SIDE

FIELD REPORT
John
Timothy S. Hill
SIGNATURE 12/1/08



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|-----------------------------|--|---------------|--|
| DATE 10-9-02 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION SURFSIDE | | | |
| CONTRACTOR AQUA SHIELD | | OWNER | |
| WEATHER SUNNY | | TEMP. ° at AM | |
| IN ATTENDANCE | | ° at PM | |
| | | | |
| | | | |

TO: CHAMPLAIN TOWERS
SURFSIDE
BALCONY REPAIRS

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STAIR 2 AND 3

1103 HOLE IN BALCONY FOR LIFT CABLE ? (2) 1 RAIL REPAIR
1103 PAINT ON BACK SIDE UPPER SHUTTER RAIL, HOLE IN CEILING (3) 1 RAIL REPAIR
1003 EDGE SLIDING GLASS DOOR NOT PAINTED,
903 EDGE SLIDING GLASS DOOR, TIGHTEN UP TOP OF SLIDING DOOR TO CEILING
803 EDGE SLIDING DOOR NOT PAINTED
703 EDGE SLIDING DOOR NOT PAINTED

1202 HOLES IN BALCONY FOR LIFTS (2) ?
1102 OK
1002 RAIL REPAIR
902 PAINT RAIL WALL BRACKETS BROWN
802 LAULKING UPPER CORNER EAST DOOR.
702 OK

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMANCE WITH THE
PERMITTED PLANS AND SPECIFICATIONS

COPIES TO CHAMPLAIN TOWERS
SURFSIDE

FIELD REPORT
SIGNATURE
11/27/03



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURE SIDE

BALCONY REPAIRS

| | | | |
|------------------------------------|--|--------------------------|--|
| DATE 10-9-02 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION SURE SIDE | | | |
| CONTRACTOR AQUA SHIELD | | OWNER | |
| WEATHER SUNNY | | TEMP. ° at AM ° at PM | |
| IN ATTENDANCE FOREMAN / WORKMEN | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

- WORKMEN ARE DOING PUNCH OUT ON STACK 4
- WORKMEN ARE CHIPPING HOT TUB AREA
- PAINTING CONTRACTOR TOUCHING UP COLUMNS
- PAINTING CONTRACTOR CLEANING STACK 9
- TAKE PICTURES WORK IN PROGRESS
- INSPECTION REPORT
- WORKMEN TO REMOVE DEBRIS FROM POOL DECK AREA

GENERAL NOTES:

COPIES TO

CHAMPLAIN TOWERS

SURE SIDE

AQUA SHIELD

FIELD REPORT

Handwritten Signature
1/27/03
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

BALCONY REPAIRS

| | |
|-----------------------------|--------------------------|
| DATE 10-7-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION SURF SIDE | |
| CONTRACTOR AQUA SHIELD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STALK 2 AND 3

602 OK

502 WHITE PAINT ON INSIDE AND OUT SIDE EDGES UPPER SHUTTER TRACK

402 TOUCH UP RAIL WALL BRACKETS, EAST WALL TOUCH UP PAINT, BACK SIDE SHUTTER RAIL

302 TOUCH UP BACK SIDE OF SHUTTERS UPPER RAIL, TOUCH UP SLIDING GLASS DOOR FRAMES

~~202~~ CHECK CAULKING

202 PARTIAL SLIDER NO KEYS

603 PAINT SEMI SLIDING GLASS DOOR, TOUCH UP CEILING WHITE EAST EDGE

503 OK

403 PAINT DOOR EDGE,

303 OK

203 PAINT EDGE SLIDER

GENERAL NOTES:

COPIES TO

CHAMPLAIN TOWERS

SURF SIDE

AQUA SHIELD

FIELD REPORT

SIGNATURE

4/27/03



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

BALCONY REPAIRS

| | | | |
|---------------------------------------|--|------------|--------------------|
| DATE 10-1-01 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION SURF SIDE | | | |
| CONTRACTOR AGUA SHIELD | | OWNER | |
| WEATHER SUNNY | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE FERMEN / WORKMEN (1) | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING:

- WORKMEN PUNCHING OUT STACK 4
- ONLY TWO PAINTERS ON SITE
- BROKEN RAILS ON 8 STACK STILL NOT REPLACED
- MANAGER WILL OPEN ALL SLIDING GLASS DOORS ON 4 STACK TO ALLOW PUNCH OUT CREW TO TEAR UP SLIDING GLASS DOOR EDGE
- CALL ALLEN LEFT MESSAGE
- WORK STILL NOT STARTED ON HOT TUB

GENERAL NOTES:

COPIES TO

CHAMPLAIN TOWERS

SURF SIDE

AGUA SHIELD

FIELD REPORT

SIGNATURE

1/27/03



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURFSIDE
CONCRETE RESTORATION


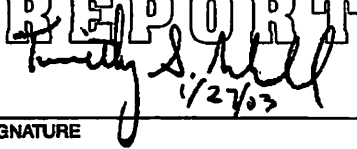
| | | | |
|-----------------------------------------------|--|------------|--------------------|
| DATE <u>9-27-02</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWER 23</u> | | | |
| LOCATION <u>SURFSIDE</u> | | | |
| CONTRACTOR <u>AQUA SHIELD</u> | | OWNER | |
| WEATHER <u>SOAKY</u> | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE <u>FOREMAN / WORKMEN (1)</u> | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

- WORKMEN HAVE COMPLETED STUCCO WORK ON SOUTH POOL WALL
- WORKMEN TOUCHING UP COLUMNS DRIVEWAY AREA.
- WORKMEN PUNCHING OUT ON STAIR 4
- NO PAINTERS ON SITE I WAS TOLD WILL BE BACK MONDAY 9-30-02
- WORK MEN HAVE COMPLETED RAIL POST POCKETS EAST WALL POOL AREA
- WORK MEN HAVE PLACED REPAIR CONCRETE HOT TUB INTERIOR

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS
SURFSIDE
AQUA SHIELD

FIELD REPORT

SIGNATURE  9/27/02



TO: CHAMPLAIN TOWERS
SURF SIDE
BALCONY REPAIRS

OBSERVATIONS AND/OR WORK IN PROGRESS:

CHALK RAILS FOR POST POCKET + WELDING REPAIRS

STATIC 12

612. REPAIR AREAS MARKED (POST PACKETS ONLY)

512 REPAIRS ON RAIL

412 REPAIRS POST POCKET ONLY

312 REPAIRS (WGLP)

212

STACK II

64 OK

51016

411 04

3.1 REPAIR AREAS IDENTIFIED

21 OK

GENERAL NOTES:

COPIES TO

SIZE SIDE

CHANPLAIN TOWERS

AQUA SHIELD

FIELD REPORT

[Signature]

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
RAIL REPAIRS

| | |
|------------------------------------|--------------------------|
| DATE <u>9-18-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURFSIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT RAILS ONLY

STACK 12

1212 MARKED AREAS IN NEED OF REPAIRS

1812 REPAIR MARKED AREAS

1012 "

9812 REPAIR MARKED AREA

812 OK

712 REPAIR MARKED AREA

612

512

412

312

212

STACK 11

1211 OK NOT PAINTED

1111 REPAIR MARKED AREAS

1011 OK

911 REPAIR MARKED AREAS

811 REPAIR MARKED AREAS

711 REPAIR MARKED AREAS

611

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD

FIELD REPORT

[Signature] [Signature]
1/21/03

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES .

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
BALCONY REPAIRS

| | | | |
|------------------------------------|--|------------|--------------------|
| DATE <u>9-18-02</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWERS</u> | | | |
| LOCATION <u>SURF SIDE</u> | | | |
| CONTRACTOR <u>AQUASHIELD</u> | | OWNER | |
| WEATHER <u>SUNNY</u> | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCHED OUT RAILS ONLY

STACK 2

207 702 OK

302 602 OK

205 502 OK

204 402 NA

302 OK

202 NA

STACK 1

1201 ONE RAIL POST POCKET

101 OK

1001 OK

901 SOUTH CORNER BRACKET

801 OK

701 OK

601 2 REPAIRS SOUTH CORNER

501 NA

701 ALL AREAS IN NEED OF REPAIRS MARKED

301 POST POCKETS MARKED

201 REPAIR AREAS MARKED

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS

AQUASHIELD

SURF SIDE

FIELD REPORT

Timothy S. Hill
1/27/03

SIGNATURE



CONCRETE CYLINDER TEST REPORT
REPORT NO. _____

| | |
|----------------------------------------------|---------------------------------------------------------------------------------|
| CLIENT | ORDER NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | DATE <u>9-18-02</u> |
| LOCATION OF PLACEMENT <u>SOUTH POOL WALL</u> | DATE OF |
| LOCATION OF SAMPLE <u>SD</u> | |
| MIX DESIGNATION | WATER ADDED YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> |
| CONCRETE CO. <u>RINKER</u> | NO. OF CYLINDERS <u>0</u> |
| TICKET NO. <u>85221301</u> | BATCH TIME <u>122</u> |
| STRENGTH ON TICKET <u>6500</u> | TIME SAMPLED <u>NA</u> |
| PLANT <u>1057 NORTH MIAMI</u> | MIXING TIME <u>2:00 HRS</u> |
| TRUCK NO. <u>283</u> | SLUMP <u>5.0</u> |
| TYPE OF MIX | AIR ENTRAINMENT <u>NA</u> |
| CUBIC YARDS IN TRUCK <u>5</u> | CONCRETE TEMPERATURE <u>NA</u> |

NOTES

PUMP HOSE CLOGGED 2 HRS BEFORE CONCRETE WAS PUMPED OUT OF TRUCK

ADDED 10 GAL WATER

DUE TO USE CONCRETE PER TIME



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
BALCONY REPAIRS

| | | | |
|-----------------------------------------------|--|------------|--------------------|
| DATE <u>9-25-02</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWERS</u> | | | |
| LOCATION <u>SURF SIDE</u> | | | |
| CONTRACTOR <u>AQUA SHIELD</u> | | OWNER | |
| WEATHER <u>SUNNY</u> | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE <u>FOREMEN / WORKMEN (3)</u> | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

- CONDUCT AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING.
- WORK MEN STUCCOING SOUTH WALL POOL AREA
 - WORKMEN REPAIRING CEILING CORNER EAST GARAGE AREA
 - WORKMEN HAVE PLACED REPAIR CONCRETE HOT TUB AREA
 - TAKE MEASUREMENTS FOR STAIRS TO BEACH ACCESS
 - PLANTER WALL NORTH WEST POOL DECK AREA INCORRECT COLOR

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD
SURF SIDE

FIELD REPORT

SIGNATURE 1/27/03



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURE SIDE

BALCONY REPAIRS

| | | | |
|---------------|------------------|------------|-----------------|
| DATE | 9-12-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWERS | | |
| LOCATION | SURE SIDE | | |
| CONTRACTOR | ADVA SHIELD | OWNER | |
| WEATHER | RAIN / CLOUDY | TEMP. | 80 ° at 9:30 AM |
| IN ATTENDANCE | MANAGER | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AM PUNCH OUT OF STACK 3 AND STACK 2, (503 TO 203) (1202 TO 802)

- 503 - EDGE SLIDING GLASS DOOR FRAME, CHECK STULLO REPAIR WEST CEILING
- 403 - EDGE SLIDING GLASS DOOR FRAME, REPAIR DECK WHERE SLIDING GLASS DOOR TRACK REPLACED, REMOVE TAPCONS AND INSTALL STAINLESS WITH THREAD SEALER
- REPAIR LOWER CORNER WEST OPENING ON EAST SIDE
- 303 - REMOVE PAINT ON GLASS, FILL HOLES ON SIDES OF SLIDING GLASS DOORS, CHECK CEILING REPAIRS AND TOUCH UP PAINT, PAINT CAULKING BROWN
- 203 - SLIDING GLASS DOOR EDGE AND TOUCH UP PAINT ON FRAMES
- 1202 CHECK CAULKING, SLIDING GLASS DOOR EDGES, REPAIR HOLES IN WALL EXISTING REPAIR NO GOOD
- 1102 CHECK SLIDING GLASS DOOR EDGE, TOUCH UP WALL PAINT, TOUCH UP PAINT ON RAILINGS LIFT DAMAGE
- 1002 CHECK PAINT ON GLASS FINGER PRINTS, CUT IN BROWN PAINT TO CEILING EDGE ABOVE DOOR, PAINT ON FILL, CHECK WINDOW TINT EAST WINDOWS HIT WITH SAND BLAST
- 902 - CHECK PAINT OVER SLIDING GLASS DOOR, CLEAN WINDOWS, PAINT ON BEDROOM WINDOWS, CUT IN EAST SIDE SLIDER
- 802 - CHECK CAULKING, SCRATCHES ON SLIDERS, CHECK CRACKS IN WATER PROOFING, BROWN
- GENERAL NOTES: PAINT ON EAST WALL, REMOVE TAPCONS REPLACE WITH STAINLESS, CHECK CAULKING EDGE OF TRACK, REPAIR HOLES IN WALLS, CHECK WEST SIDE LOWER WALL AREA NEEDS GRINDING, CHECK WATER PROOFING AT SLIDING GLASS DOOR EDGE, APARTMENT NEEDS CLEANING (CARPETS) CARPET CHECK CAULKING EAST WINDOW CLEAN ALL WINDOWS

COPIES TO

CHAMPLAIN TOWERS

ADVA SHIELD

SURE SIDE

FIELD REPORT

[Signature]

SIGNATURE

9-12-02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURE SIDE

HOT TUB REPAIRS, FORMS SOUTH WALL, STUCCO
ON PLANTERS

| | | | |
|---------------|-------------------|------------|----------------|
| DATE | 9-12-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWERS | | |
| LOCATION | SURE SIDE | | |
| CONTRACTOR | AQUA SHIELD | OWNER | |
| WEATHER | RAIN / CLOUDY | TEMP. | 80° at 9:30 AM |
| IN ATTENDANCE | FOREMEN / WORKMEN | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED
THE FOLLOWING

- WORK MEN HAVE INSTALLED REBAR TO SOUTH POOL WALL, ELECTRICAL HAS
COMPLETED AND WORK MEN ARE INSTALLING FORMS
- WORKMEN ARE REMOVING HOLLOW STUCCO ON PLANTERS.
- LOOKED AT SOUTH/WEST PLANTER WITH MANAGER. PLANTER HAS STRUCTURE
CRACK AND WOULD BE NEED EXTENSIVE REPAIR MANAGER WANTS TO PATCH AT
THIS TIME
- WORKMEN HAVE BEEN SAW CUTTING AND CHIPPING ON HOT TUB IN GARAGE AREA
WITH NO DUST MACHS. CARS IN GARAGE ARE COVERED WITH DUST. WORK MEN
HAVE BEEN INFORMED OF THIS PROBLEM PREVIOUSLY AND CARS HAVE HAD TO BE CLEANED
- TAKE PICTURES OF ALL REPAIR AREAS

GENERAL NOTES: ALL AREAS INSPECTED ARE IN SUBSTANTIAL CONFORMANCE WITH
THE PERMITTED PLANS AND SPECIFICATIONS

COPIES TO

CHAMPLAIN TOWERS

AQUA SHIELD

SURE SIDE

FIELD REPORT

[Signature]

9-12-02

SIGNATURE



A. T. DESIGNS, INC.

CIVIL / STRUCTURAL ENGINEERING AND ENVIRONMENTAL SERVICES

September 17, 2002

Mr. Daniel B. Nieda, R. A., Building Official
TOWN OF SURFSIDE
BUILDING DEPARTMENT
9293 Harding Place
Surfside, Florida 33154

Re: Balcony Restoration and Waterproofing
Champlain Tower Condominium
8777 Collins Ave.
Miami Beach, FL 33154
Permit Number: 02-20

Dear Mr. Nieda,

The concrete restoration to the above referenced building is ongoing and periodic inspections have been performed to observe the work in progress. Inspection reports have been prepared detailing all observations and any field modifications implemented during the completion of the work.

Included are copies of the inspection reports, concrete testing, and other various reports that are required for submission to your department. Please contact our office should there be any further questions.

Respectfully,
A. T. Designs, Inc.


9/17/02
Timothy S. Marshall, PE
Florida Reg. No. 41992

Permit No. 02-20

cc Champlain Towers
Aqua Shield
File



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
BALCONY REPAIRS

| | |
|-------------------------------------------|--------------------------------------------|
| DATE <u>9-6-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. <u>89</u> ° at <u>9:30</u> <u>AM</u> |
| IN ATTENDANCE <u>FOREMAN / WORKMEN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCT AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING:

- PAINTERS ~~ON~~ WORKING ON STACK 7
- WORKMEN PRESSURE WASHING DRIVEWAY
- WORKMEN HAVE CUT BACK STUCCO AND ARE DRILLING HOLES TO DOUL IN NORTH WALL
- INSPECTION REPORT
- PICTURES
- NO ONE WORKING ON PUNCH OUT OF ANY STACKS
- NO ONE WORKING ON RAIL POST POCKETS
- WORKMEN TOUCHING UP WEST PLANTERS WITH WALL PATCH NEED TO SMOOTH OUT REPAIRS

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD
SURF SIDE

FIELD REPORT

SIGNATURE

9/17/02



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES.
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS

| | | | |
|------------------------|--|------------|---------|
| DATE <u>8-24-02</u> | | PERMIT NO. | |
| PROJECT | | | |
| LOCATION | | | |
| SURFSIDE | | OWNER | |
| CONTRACTOR | | OWNER | |
| AQUA SHIELD | | OWNER | |
| WEATHER | | TEMP. | ° at AM |
| SUNNY | | ° at | PM |
| IN ATTENDANCE | | | |
| | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACK 3

PA - RAILS IN NEED OF MORE SANDING, EDGE DOOR FRAMES, PAINT TOUCH UP WALL
TWO HOLES IN BALCONY FOR LIFT, ONE RAIL REPAIR
11A3 PAINT ON SHUTTERS RAIL UPPER INSIDE EDGE, FILL HOLE IN CEILING WEST
END, NEEDS GROMMETS FOR TWO EAST HOLES, ~~PAINT~~ PAINT ON TILE FLOOR
1003 RAIL NEEDS TOUCH UP, SLIDING GLASS DOOR GLASS NEED CLEANING, TOUCH UP CEILING
STUCCO WORK
903 TOUCH UP STUCCO CEILING EDGE ~~PAINT~~ WALL PAINT CORNER EDGE WEST DOOR
DOOR FRAME EDGES NEED TO BE PAINTED AND TOUCH UP CEILING TO DOOR
803 OK
7A3 DOOR EDGE FRAME NEEDS PAINTING
603 TOUCH UP STUCCO ON CEILING, PAINT DOOR EDGE

- INSPECT HOT TUBS WITH MANAGER NEED HOT TUBS SUB CONTRACTOR TO
PROVIDE SPECIFICATIONS ON EDGE REPAIR.

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMANCE WITH
WITH THE PERMITTED PLANS AND SPECIFICATIONS

COPIES TO CHAMPLAIN TOWERS

AQUA SHIELD
SURFSIDE

FIELD REPORT


9/17/02
SIGNATURE



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE

| | |
|--------------------------------------------|-------------------------------------|
| DATE <u>8-20-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION | |
| CONTRACTOR | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. <u>90</u> ° at <u>9:15</u> AM |
| IN ATTENDANCE <u>FOREMAN / WORK MEN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS,
AND OBSERVED THE FOLLOWING

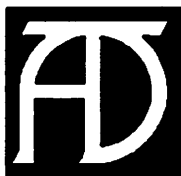
1) MEETING REVIEW MEETING MINUTES

2) STAGE 7 - WORKMEN HAVE POURED TOP 6 BELCONIES AND
ARE CHIPPING LOWER BELCONIES

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD

FIELD REPORT
Timothy S. Hill
9/17/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

| | |
|---------------------------|--------------------------|
| DATE 8-16-02 | PERMIT NO. |
| PROJECT | |
| LOCATION | |
| CONTRACTOR AQUA SHIELD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CHALK RAIL POST PACKETS STACK 8 SOUTH/WEST SIDES

STACK 8 - PH-DK

1108 - 2 RAIL POST MARKED

1008 1 RAIL POST MARKED

908 2 RAILS REMARKED, SECTION MISSING

808 OK

708 4 RAIL POST MARKED

608 7 RAIL POST MARKED

508 4 RAIL POST MARKED MISSING SECTION RAIL

408 OK

308 14 RAIL POST MARKED

208 OK

GENERAL NOTES:

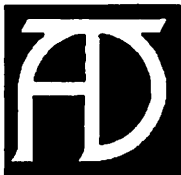
COPIES TO

CHAMPLAIN TOWERS

AQUA SHIELD

FIELD REPORT

SIGNATURE...



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS

| | |
|----------------------------------|--------------------------|
| DATE <u>8-16-02</u> | PERMIT NO. |
| PROJECT | |
| LOCATION | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT 5 STAIRS

PH - CHECK PAINT ON SLAB EDGE, CLEAN PAINT OFF GLASS, CLEAN PAINT OFF SHUTTERS, CHECK PAINT ON RAILINGS AND SURFACE, PAINT INSIDE SLIPPER PATCH EDGES AROUND SLIDING GLASS DOOR OPENINGS, REMOVE TAPE FROM GLASS DOOR

1:05 - REMOVE SCREW FROM WALL PATCH HOLE, REMOVE TAPE FROM GLASS, CHECK CAULKING CHECK PAINT DOOR FRAMES, TOUCH UP CEILING CHECK SPOTS ON RAIL PAINT, REMOVE CONCRETE FROM RAILS AND TOUCH UP, CHECK CAULKING

1:05 - CHECK RAILING SURFACE AND TOUCH UP, CHECK CAULKING, WHITE PAINT ON SHUTTERS TOUCH UP, TOUCH UP WALL PAINT, TOUCH UP PAINT DOOR FRAME, CLEAN GLASS AND REMOVE TAPE, PAINT ON TILE FLOOR, CLEAN SHUTTER TRACKS, TOUCH UP CEILING ABOVE SHUTTERS AND EDGE

9:05 - CHECK DOOR FRAMES AND TOUCH UP, REPAIR WALLS AND PAINT, PAINT ON SHUTTERS, CHECK CEILING EDGE, CHECK RAILINGS FOR SURFACE AND TOUCH UP PAINT, CHECK PAINT ON TILE, CHECK CAULKING

GENERAL NOTES: PARPET IN ALL CHECK PAINT IN SEAMS AND EDGES

MEET WITH MANAGER

COPIES TO CHAMPLAIN TOWERS

AQUA SHIELD

FIELD REPORT

[Signature] Twitty S. Hill
SIGNATURE 9/17/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|-----------------------------|--|--------------------------|--|
| DATE 8-14-02 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION SURF SIDE | | | |
| CONTRACTOR AQUA SHIELD | | OWNER | |
| WEATHER SUNNY | | TEMP. ° at AM ° at PM | |
| IN ATTENDANCE | | | |
| | | | |
| | | | |

TO: CHAMPLAIN TOWERS
SURF SIDE
BALCONY REPAIRS

OBSERVATIONS AND/OR WORK IN PROGRESS:

TUNED OUT STALIC 4

404 - NORTH WEST SLIDING GLASS DOOR OPERATION NO GOOD, CHECK CEILING IN FRONT OF DOOR OPENINGS, HOLE IN HAND RAIL, CHECK DOOR OPENINGS FOR EDGE REPAIRS, PAINT ON GLASS

304 - PAINT ON SLIDING GLASS DOOR, CHECK CAULKING NORTH EAST DOOR CHECK PAINT BROWN TO WHITE CUT IN NO GOOD

202 - INCOMPLETE (EAST DOOR ADJUSTMENT NO GOOD, NEED TO COMPLETE WEST DOOR OPENING, RAILING NEED SANDING AND TOUCH UP, NEED TO INSTALL STAINLESS SCREWS WITH THREAD SEALER, TOUCH UP WALL PAINT, TOUCH UP CEILING PAINT, CHECK WATER PROOFING CRACKING AT EDGE, SLIDING GLASS DOOR TRACK HAS BEEN RECESSED IN TO DECK POSSIBLE PROBLEM WITH TILE INSTALLATION

GENERAL NOTES: CHECK ALL SLIDING GLASS DOOR HANDLES FOR PAINT

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD
SURF SIDE

FIELD REPORT
Timothy S. Hill
9/17/02
SIGNATURE



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPAIN TOWERS

| | | | |
|-----------------|--|------------|---------|
| DATE 8-14-02 | | PERMIT NO. | |
| PROJECT | | | |
| LOCATION | | | |
| CONTRACTOR | | OWNER | |
| WEATHER | | TEMP. | ° at AM |
| | | | ° at PM |
| IN ATTENDANCE | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACK 4
904 - PAINT ON GLASS AND TILE FLOOR, TOUCH UP RAIL PAINT (FOOT PRINT) CHECK PAINT
NORTH WEST DOOR, TOUCH UP WALL PAINT CORNER NORTH WEST DOOR
1104 - NEED TO INSTALL SLIDING GLASS DOOR, PAINT SPOTS ON RAIL
OVER PAINT EDGE PAINT TO WHITE CEILING, MARKS ON CEILING PAINT
DESIGN EDGE GRAVE TO DEEP IN CENTER AREA, CHECK PAINT ON SLIDING
GLASS DOOR GLASS
1004 - PAINT ON SLIDING GLASS DOOR GLASS, OVER PAINT EDGE TO CEILING
HOLE EDGE OF CEILING NORTH EAST CORNER, PAINT ON TILE FLOOR
MARKS ON CEILING, PATCH EDGE WALL AREA NORTH WEST SLIDER
904 - PAINT ON SLIDING GLASS DOOR GLASS, CHECK STUCCO WORK ON CEILING
804 - PAINT ON SLIDING GLASS DOOR GLASS, CHECK STUCCO REPAIR ON CEILING, PAINT ON
TILE FLOOR, REPAIR CORNER EDGE NORTH WEST SLIDING GLASS DOOR, CHECK
CAULKING NORTH EAST DOOR TOP EDGE
704 - PAINT ON SLIDING GLASS DOOR, PAINT ON TILE FLOOR, WIRE STRAP IN CONCRETE
ATTACHED TO RAIL, ~~FOR REPAIR PAINTS FOR REPAIR~~ FOR
604 - PAINT ON SLIDING GLASS DOOR GLASS, TOUCH UP WALL PAINT NORTH EAST EDGE
CHECK STUCCO REPAIR CEILING AREA
504 - PAINT SLIDING GLASS DOOR GLASS, CHECK CAULKING NORTH EAST DOOR, CHECK
PAINT ON TILE FLOOR, CHECK RAIL FOR SANDING AND TOUCH UP. CHECK PAINT ON
DOOR FRAME NORTH EAST DOOR

GENERAL NOTES:

COPIES TO

FIELD REPORT

SIGNATURE

Timothy S. Hall
9/17/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURE SIDE

| | |
|------------------------------------|--------------------------|
| DATE <u>8-14-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURE SIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

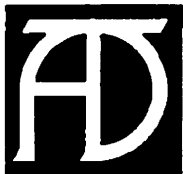
RAIL REPAIRS STACK 4

PH04 - RAIL OK
1104 - 3 AREAS MARKED
1004 - 2 AREAS MARKED
904 - 1 AREA MARKED
804 - 1 AREA MARKED
704 - OK
604 - OK
504 - OK
404 - 1 AREA MARKED
304 - 1 AREA MARKED
202 - RAIL OK

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD

FIELD REPORT
Timothy S. Hill
9/17/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

| | | | |
|-------------------------------------|--|--------------------------|--|
| DATE 8-12-02 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION | | | |
| CONTRACTOR | | OWNER | |
| WEATHER | | TEMP. ° at AM ° at PM | |
| IN ATTENDANCE FOREMEN / WORK MEN | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCT AN ON SITE INSPECTION OF THE WORK IN PROGRESS
AND OBSERVED THE FOLLOWING

STACK 5 PH - INDEPENDENT CONTRACTOR HAS REMOVED ALL REMAINING
TILE AND HAS EXPOSED ADDITIONAL SURFACE SPALLS
AND THREE ADDITIONAL RAIL POST REPAIRS. TAKE
PICTURES AND MARK ALL AREAS

STACK 7 PH - WORKMEN NEED TO REMOVE SOUTH SIDE HURRICANE SHUTTER
ALSO NEED TO INSTALL POLE SHORES TO IT TO SUKRAE PH

STACK 8 - PH 1 RAIL POST REPAIR NEEDED 408, 1108 TRAIL POST IN NEED
OF 12 REPAIRS, 1008 4 RAIL POST IN NEED OF REPAIRS, 908 IN NEED
OF 4 REPAIRS, 808 IN NEED OF NO REPAIRS, 708 IN NEED OF 7
REPAIRS, 608 IN NEED OF 4 REPAIRS, 508 IN NEED OF 5 REPAIRS
408 IN NEED OF 2 REPAIRS, 308 IN NEED OF 18 REPAIRS, 208 IN
NEED OF 3 REPAIRS

TOTAL RAIL POST REPAIRS FOR STACK 8 INCOMPLETE AT THIS TIME IS 53

STACK 4 - WORKMEN INSTALLING SLIDING GLASS DOOR ON 204

STACK 2 - WORK

GENERAL NOTES:

COPIES TO

CHAMPLAIN TOWERS

SURF SIDE, AQUASHIELD

FIELD REPORT

SIGNATURE

Timothy S. Hill
9/17/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURE SIDE

| | |
|-------------------------------------------|------------------------------------|
| DATE <u>8-7-02</u> | PERMIT NO. |
| PROJECT | |
| LOCATION | |
| CONTRACTOR | OWNER |
| WEATHER <u>CLOUDY</u> | TEMP. <u>90</u> at <u>10:25</u> AM |
| IN ATTENDANCE <u>FOREMEN / WORKMEN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCT AN ON SITE INSPECTION

STACK 11 - CHECK RAIL POST REPAIRS WITH RAILING CONTRACTOR
MARKEED POST IN NEED OF ADDITIONAL REPAIRS

STACK 8 SOUTH - WORKMEN PLACING REPAIR CONCRETE

STACK 5 AND 6 - PAINTERS APPLY PAINT TO WALL AREAS
PAINTERS ALSO PAINTING WALL BETWEEN
STACKS 11 AND 12

INFORMED PAINTING SUPERVISOR THAT WORKMEN
NEED TO WEAR HARDHATS

GENERAL NOTES:

COPIES TO

FIELD REPORT

[Signature] 9/17/02

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

| | | | |
|---------------|---------------------|------------|-----------------|
| DATE | 8-5-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWERS | | |
| LOCATION | SURF SIDE | | |
| CONTRACTOR | AQUA SHIELD | OWNER | |
| WEATHER | CLAYDY | TEMP. | 90 ° at 9:15 PM |
| IN ATTENDANCE | FOREMAN / 6 WORKMEN | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING

STACK 8 SOUTH - INSPECT FORMS AND REBAR PLACEMENT. MARKED ADDITIONAL AREAS IN NEED OF REPAIRS. ONCE WORK MEN HAVE COMPLETED REPAIRS THEY CAN POUR CONCRETE. ALL AREA HAVE BEEN INSPECTED, MEASURED AND DEPICTED ON AS-BUILT DRAWINGS

STACK 8 WEST - PREPARE AS-BUILT DRAWINGS FOR UNITS 804, 803, 802

WORKMEN PRESSURE CLEANING BUILDING

CONTRACTOR MAKING RAILING REPAIRS TAKING MEASUREMENTS

DELIVER INSPECTORIAL PACKAGE TO MANAGER, AQUA SHIELD FOREMAN AND SURF SIDE BUILDING DEPT.

WORKMEN POUR TIE BEAM ON SECTION OF WALL ON NORTH SIDE OF BUILDING

GENERAL NOTES:

ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS

MEET WITH MANAGER

COPIES TO

CHAMPLAIN TOWERS

AQUA SHIELD
SURF SIDE

FIELD REPORT

SIGNATURE

Timothy S. Hill
9/17/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

| | |
|--------------------------------------|------------------------|
| DATE 7-30-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION SURF SIDE | |
| CONTRACTOR AQUA SHIELD | OWNER |
| WEATHER SUNNY | TEMP. 85 ° at 11:00 AM |
| IN ATTENDANCE 1 FOREMEN / WORKMEN | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING:

① MEET WITH CONTRACTOR AND MANAGER INSPECT SLIDING GLASS DOOR OPERATION OF UNIT 1202. DOOR OPERATION NO GOOD CONTRACTOR NEEDS TO MEET WITH INSTALLER.

② WORKMEN CHIPPING STACK 7

③ WORKMEN CHIPPING STACK 8 SOUTH SIDE

④ WORKMEN PRESSURE CLEANING STACK 5

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS.

COPIES TO

CHAMPLAIN TOWERS

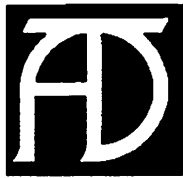
AQUA SHIELD

SURF SIDE

FIELD REPORT

SIGNATURE

9/17/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE

| | |
|-------------------------------------------|-------------------------------------|
| DATE <u>7-29-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURFSIDE</u> | |
| CONTRACTOR <u>ADDA SHIELD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. <u>85</u> ° at <u>9:45</u> AM |
| IN ATTENDANCE <u>FOREMAN / WORKMEN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF WORK IN PROGRESS AND OBSERVED THE FOLLOWING

- ① INSPECTED STACK 8 WEST SIDE MARKED ADDITIONAL AREAS IN NEED OF REPAIRS. INSPECTED FORMS ALL AREAS READY TO POUR
- ② WORKMEN CHIPPING STACK 7
- ③ WORKMEN PRESURE WASHING STACK 5
- ④ PAINTING ON NORTH SIDE OF BUILDING
- ⑤ WORKMEN SAND BLASTING REBAR STACK 8 SOUTH SIDE

GENERAL NOTES: MEET WITH MANAGER AND CONTRACTOR

NEED INSPECTION ON 7-30-02 (SLIDING GLASS DOOR) AT 12:30

COPIES TO CHAMPLAIN TOWERS
ADDA SHIELD
SURFSIDE

FIELD REPORT
Timothy S. Hill
9/17/02
SIGNATURE



A. T. DESIGNS, INC.

CIVIL / STRUCTURAL ENGINEERING AND ENVIRONMENTAL SERVICES

July 29, 2002

Mr. Daniel B. Nieda, R. A., Building Official
TOWN OF SURFSIDE
BUILDING DEPARTMENT
9293 Harding Place
Surfside, Florida 33154



Re: Balcony Restoration and Waterproofing
Champlain Tower Condominium
8777 Collins Ave.
Miami Beach, FL 33154
Permit Number: 02-20

Dear Mr. Nieda,

A.T. Designs has been contracted by the Champlain Towers Condominium to conduct periodic inspections to the concrete restoration being performed to the building. The concrete restoration to the above referenced building is ongoing and periodic inspections have been performed to observe the work in progress. Inspection reports have been prepared detailing all observations and any field modification implemented during the completion of the work.

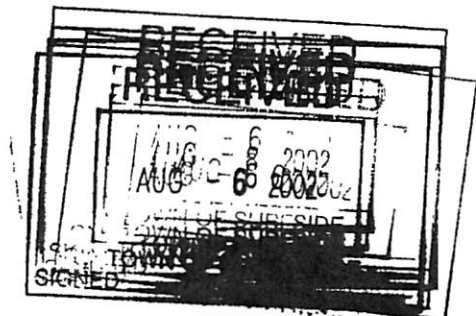
Included are copies of the inspection reports, concrete testing, and other various reports that are required for submission to your department. Please contact our office should there be any further questions.

Respectfully,
A. T. Designs, inc.

Timothy S. Marshall
7/29/02
Timothy S. Marshall, PE
Florida Reg. No. 41992

Permit No. 02-20

cc Champlain Towers
Aqua Shield
File





A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
CONCRETE RESTORATION
SURFSIDE, MIAMI, FL.

| | |
|----------------------------------|--------------------------|
| DATE 7/22/02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION CONCRETE RESTORATION | |
| CONTRACTOR AQUASHIELD | OWNER |
| WEATHER | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

- 604 - NO ACCESS, SCREWED SHUT DOORS (BOTH)
- 603 - NO ACCESS, SCREWED SHUT DOORS (BOTH)
- 602 - NO KEY TOP LOCK. NO ACCESS.
- 601 - 3 MARKED AREAS OF RAIL REPAIR.
- 612 - NO ACCESS, TAPED SHUT (ALL DOORS)
- 512 - NO ACCESS, TAPED SHUTTERS (ALL DOORWAYS)
- 501 - 3 MARKED AREAS OF RAIL REPAIR
- 502 - RAILS OK.
- 503 - NO ACCESS, SCREWED SHUT DOORS (BOTH)
- 504 - NO ACCESS, SCREWED SHUT DOORS (BOTH)
- 404 - NO ACCESS, SCREWED SHUT DOORS (BOTH)
- 403 - NEED DOOR INSTALLED IN LIVING ROOM, NO ACCESS THRU BEDROOM DOOR BECAUSE IT IS SCREWED SHUT.
- 402 - RAILS OK.
- 401 - 6 MARKED AREAS OF RAILING REPAIR
- 412 - ALL DOORS ARE TAPE SHUT, NO ACCESS.
- 301 - FOUR (4) MARK AREAS OF RAIL REPAIR
- REPAIR 3 RAIL POST POCKETS.
- 312 - NO ACCESS, ALL DOORS ARE TAPED SHUT.
- 302 - RAILINGS OK
- PATCH, CEILING REPAIR AREAS PRIOR TO FINAL COAT OF PAINT
- GENERAL NOTES: 303 - BENT RAILING, STRAIGHTEN OUT.
- 304 - LOWER LOCK NOKEY. BOTH DOORS ARE SCREWED SHUT
- NO ACCESS.
- 203 - (2) TWO BROKEN PICKETS, BENT RAIL CAP
- 202 - NO ACCESS, KEYS DO NOT WORK.

COPIES TO - CHAMPLAIN TOWERS
- AQUASHIELD

FIELD REPORT


Timothy S. Hill
7/29/02

A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

**300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201**

TO: CHAMPLAIN TOWERS
CONCRETE RESTORATION
SURFSIDE, MIAMI, FL.

| | | |
|----------------------------------|------------|--------------------------|
| DATE 7/22/02 | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | |
| LOCATION CONCRETE RESTORATION | | |
| CONTRACTOR ADVASIN(ED) | | OWNER |
| WEATHER SUNNY | | TEMP. ° at AM ° at PM |
| IN ATTENDANCE ED | | |
| | | |
| | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

201 - (1) AREA OF REPAIR AT RAIL
212 - NO ACCESS TAPED WINDOWS (ALL)

GENERAL NOTES:- ALL WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS.

- MET WITH MANAGER.
- PREPARED AN INSPECTION REPORT.

COPIES TO - CHAMPLAIN TOWERS
- AQUASHIELD

FIELD REPORT

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
CONCRETE RESTORATION
MIAMI, FL.

| | |
|-----------------------------------------|--------------------------|
| DATE <u>7/18/02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>CONCRETE RESTORATION</u> | |
| CONTRACTOR <u>AQUASHIELD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. ° at AM ° at PM |
| IN ATTENDANCE <u>8 WORKMEN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

- INSPECTED PH01 THRU 808 , MARKED OUT ADDITIONAL REPAIR AREAS.
- MARKED AREAS OK TO POUR ON 08 STACK.
- PHOTOGRAPHED REPAIR AREAS.
- OBSERVED CORRECTIONS ON 08 STACK, OK TO POUR FORMED AREAS.
- INSPECTED AND MARKED OUT ADDITIONAL REPAIR AREAS ON 06 STACK.
- 05 STACK PUNCHING OUT REPAIR AREAS.

GENERAL NOTES: - ALL WORK IS IN SUBSTANCIAL CONFORMANCE
WITH THE PERMITTED PLANS AND SPECIFICATIONS
- MET WITH ~~THE~~ CONTRACTOR
- PREPARED AN INSPECTION REPORT

COPIES TO

FIELD REPORT

Trinity S. Hill
7/29/02

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS

| | |
|------------------------------------|--------------------------------------|
| DATE <u>7-15-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SOUTH SIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. <u>80</u> ° at <u>10:00</u> AM |
| IN ATTENDANCE <u>FOREMAN</u> | |
| <u>B WORKMEN</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING:

STAKE 4 - RAIL POST REPAIRS NEEDED FOR 406, PH, 410, 403. PAINT JOB COMPLETED

STAKE 8 - CONCRETE REPAIR COMPLETED ON 807
WORKMEN INSTALLING FORMS
WORKMEN CHIPPING WEST SIDE

STAKE 5 - ALL BELCONIES POURED EXCEPT PH FLOOR -
LK ALL RAIL POST ON PH FLOOR

GENERAL NOTES:

COPIES TO CHAMPLAIN TOWERS

AQUA SHIELD

SOUTH SIDE

FIELD REPORT

Timothy S. Hill
7/29/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS

| | |
|------------------------------------|---------------------------------------|
| DATE <u>7-11-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>AQUASHIELD</u> | OWNER |
| WEATHER <u>CLOUDY</u> | TEMP. <u>at</u> <u>8:30</u> <u>AM</u> |
| IN ATTENDANCE <u>FOREMEN</u> | |
| <u>8 WORKMEN</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCT AN INSPECTION OF BELLONIE HAND RAILS

| UNIT # | # RAIL POST | NOTES |
|---------|-------------|-----------------------|
| 1204 | 2 | SCREEN DOOR DAMAGED |
| 1203 | 3 | SECURE RAILS |
| 1201 | 0 | SECURE RAILS |
| 1202 | 0 | SECURE RAILS |
| 1212 | 2 | SECURE RAILS |
| 1104 NA | | NEED SLIDER INSTALLED |
| 1103 | 0 | |
| 1102 | 1 | |
| 1101 | 10 | |
| 1112 | 9 | |
| 1004 | 0 | |
| 1003 | 3 | SECURE RAIL |
| 1002 | 0 | |
| 1001 | 0 | |
| 1012 | 3 | SECURE RAIL |

GENERAL NOTES: ALL AREAS IN NEED OF REPAIRS
HAS BEEN MARKED

MEET WITH MANAGER

COPIES TO CHAMPLAIN TOWERS
AQUASHIELD
SURF SIDE

FIELD REPORT

Timothy S. Hill
SIGNATURE 7/29/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS

PAGE 2

| | | | |
|------------------------------------|--|------------|--------------------|
| DATE <u>7-11-02</u> | | PERMIT NO. | |
| PROJECT <u>CHAMPLAIN TOWERS</u> | | | |
| LOCATION | | | |
| CONTRACTOR | | OWNER | |
| WEATHER | | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE | | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

| UNIT # | # RAIL POST | NOTES |
|--------|-------------|-------------------------------------------------------------------------------|
| 904 | 0 | TOUCH UP CEILING PAINT TOUCH UP RAILS CHECK STUCCO WORK CEILING AREA |
| 903 | 0 | |
| 901 | 3 | SECURE RAIL |
| 912 NA | | |
| 902 NA | | |
| 804 | 1 | |
| 803 | 3 | |
| 801 | 1 | |
| 802 NA | | |
| 812 | 1 | |
| 811 | 1 | SECURE RAILS |
| 704 | | TOUCH UP PAINT ON RAILS |
| 705 NA | | |
| 702 | 0 | |
| 701 | 8 | |
| 712 | 6 | SECURE RAILS |

GENERAL NOTES:

COPIES TO

FIELD REPORT

Timothy S. ...
7/29/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURFSIDE
MIAMI, BEACH, FL

| | |
|------------------------------------|---------------------------------------------|
| DATE <u>7-9-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURFSIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>CLOUDY</u> | TEMP. <u>80</u> ° at <u>10:00</u> <u>AM</u> |
| IN ATTENDANCE <u>FOREMAN</u> | |
| <u>10 WORKMEN</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACK 6

612 - REMOVE PLYWOOD, FILL HOLES FROM TAPCONS, CLEAN
BELCONIE, CLEAN SHUTTERS AND TRACKS, CLEAN WINDOWS,
WINDOWS HAVE NO SEVER SCRATCHES.

611 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIE, CLEAN
SHUTTERS AND TRACKS, CLEAN WINDOWS, WINDOWS HAVE
EXISTING SCRATCHES. REPAIR TWO RAIL POST.

610 - REMOVE PLYWOOD, FILL HOLES FROM TAPCONS, CLEAN
BELCONIE, CLEAN SHUTTERS AND TRACKS, CLEAN WINDOWS,
WINDOWS HAVE NO SEVER SCRATCHES.

609 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIES, CLEAN
SHUTTERS AND TRACKS, CLEAN WINDOWS, WINDOWS HAVE
NO SEVER SCRATCHES. ONE RAIL POST REPAIR

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL
CONFORMANCE WITH THE PLANS AND SPECIFICATIONS
PREPARED AN INSPECTION REPORT

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD
SURFSIDE

FIELD REPORT

SIGNATURE

7/29/02



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
PAGE 2

| | |
|-----------------------|--------------------------|
| DATE <u>7-9-02</u> | PERMIT NO. |
| PROJECT | |
| LOCATION | |
| CONTRACTOR | OWNER |
| WEATHER | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACK 6

608 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIE, CLEAN
WINDOWS, CLEAN SHUTTERS AND TRACKS, WINDOWS HAVE
NO SEVER SCRATCHES.

607 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIE, CLEAN
WINDOWS, CLEAN SHUTTERS AND TRACKS, WINDOWS HAVE
NO SEVER SCRATCHES. TWO RAIL POST REPAIRS.

606 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIES, CLEAN
WINDOWS, FOUR RIAL POST, WINDOWS HAVE NO SEVER
SCRATCHES.

605 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIE, CLEAN
SHUTTERS AND TRACKS, CLEAN WINDOWS, WINDOWS HAVE NO
SEVER SCRATCHES. ONE RAIL POST, NEED TO CHIP AREA
MARKED IN FRONT OF SLIDER BE HIND PLYWOOD
NORTH SIDE.

GENERAL NOTES:

COPIES TO

FIELD REPORT

Timothy S. Hill
7/29/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|----------------|--------------------------|
| DATE 7-9-02 | PERMIT NO. |
| PROJECT | |
| LOCATION | |
| CONTRACTOR | OWNER |
| WEATHER | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

TO: CHAMPLAIN TOWERS
PAGE 3

OBSERVATIONS AND/OR WORK IN PROGRESS:

PUNCH OUT STACK 6

604 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIE, CLEAN WINDOWS, WINDOWS HAVE NO SEVERE SCRATCHES.

603 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIE, CLEAN WINDOWS, WINDOWS HAVE NO SEVERE SCRATCHES
TWO RAIL POST REPAIRS.

602 - REMOVE PLYWOOD, FILL HOLES, CLEAN BELCONIE, CLEAN WINDOWS, WINDOWS HAVE NO SEVERE SCRATCHES. CLEAN SHUTTERS AND TRACKS

STACK 8 - WORKMEN HAVE INSTALLED POLE SHORES.

NORTHWEST CORNER - PAINT PREURE WASHING.

STACK 5 - WORKMEN APPLYING STUCCO

STACK 9 - WORKMEN HAVE MOVED LIFT AND ARE WORKING ON PH 9 SOUTH SIDE BELCONIE

GENERAL NOTES: NO PICTURES TO NET.

COPIES TO

FIELD REPORT

Timothy S. Hill
7/29/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI BEACH, FL

| | |
|------------------------------------|--------------------------------------------|
| DATE <u>6-28-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>ADVA-SHIELD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. <u>85</u> ° at <u>9:30</u> <u>AM</u> |
| IN ATTENDANCE <u>FOREMAN</u> | |
| <u>WORKMEN</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN
PROGRESS AND OBSERVED THE FOLLOWING

STACK 4 - INSPECT SLIDING GLASS DOORS ALL UNITS HAVE
A SMALL AMOUNT OF SCRATCHES.

STACK 5 - INSPECT REINFORCEMENT BARS AND FORMS
MARK AREAS IN NEED OF ADDITIONAL REPAIRS
WHEN REPAIRS COMPLETED READY TO POUR
TAKE PICTURES

STACK 8 - PICTURES OF DAMAGED RAILS : INFORMED
FOREMAN ALL RAILS WERE EDGE CHIPPED
NEED TO BE TIED WITH WIRE

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL
CONFORMANCE WITH THE PERMITTED PLANS AND
SPECIFICATIONS

PREPARED AN INSPECTION REPORT

COPIES TO CHAMPLAIN TOWERS
ADVA-SHIELD
SURF SIDE

FIELD REPORT

[Signature] 7/1/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURF SIDE

MIAMI BEACH, FL

| | | | |
|---------------|-------------------|------------|---------------|
| DATE | 6-26-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWERS | | |
| LOCATION | SURF SIDE | | |
| CONTRACTOR | AQUASHIELD | OWNER | |
| WEATHER | RAIN | TEMP. | 80 at 4:30 PM |
| IN ATTENDANCE | FOREMEN / WORKMEN | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING

STACK 6 - INSPECTED PLACEMENT OF REINFORCEMENT BARS AND COATING. ALL FORMS ARE INSTALLED PROPERLY. READY TO POUR

PAINTERS HAVE STARTED APPLYING PRIMER COAT TO WALLS. PRIMER IS TOO TRANSPARENT IS NOT COMPLETELY COVERING ORIGINAL COLOR WITH ONE COAT.

WORKMEN CLEANING WEST SIDE OF SOIL SITE

GENERAL NOTES:

PREPARED AN INSPECTION REPORT

COPIES TO

CHAMPLAIN TOWERS

AQUASHIELD

SURF SIDE

FIELD REPORT

[Signature]

SIGNATURE

7/29/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI BE

| | |
|------------------------------------|--------------------------------------------|
| DATE <u>6-19-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>CLOUDY</u> | TEMP. <u>85</u> ° at <u>9:00</u> <u>AM</u> |
| IN ATTENDANCE <u>FORMEN</u> | |
| <u>6 WORKMEN</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK
IN PROGRESS AND OBSERVED THE FOLLOWING

- 1) STACK 5 MARKED REINFORCEMENT BARS IN NEED
OF ADDITIONAL REPAIRS. WORK MEN HAVE INSTALLED
DOWELS TO EDGE REPAIRS
- 2) STACK 9 WORKMEN ARE APPLYING STUCCO TO REPAIRS
- 3) STACK 8 WORKMEN CHIPPING UNIT BELLOTTES
- 4) STACK 6 WORKMEN HAVE SAND BLAST AND COATED
REINFORCEMENT BARS WITH AN ANTI-COR
ROSIVE AGENT
- 5) PAINTERS HAVE STARTED PAINTING UPPER
WALL AREAS

GENERAL NOTES:

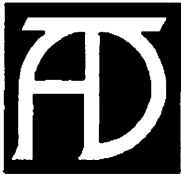
COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD
SURF SIDE

FIELD REPORT

John

SIGNATURE

Timothy S. Hill
7/29/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI BEACH, FL

| | |
|------------------------------------|--------------------------------------------|
| DATE <u>6-18-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. <u>85</u> ° at <u>9:00</u> <u>AM</u> |
| IN ATTENDANCE <u>FOREMAN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN
PROGRESS AND OBSERVED THE FOLLOWING.

- 1) WORKMEN ARE SAND BLASTING ON STACK 6
- 2) WORKMEN ARE APPLYING STUCCO ON STACK 9
- 3) WORKMEN ARE CHIPPING ON STACK 8
- 4) WORKMEN ARE CUTTING REINFORCEMENT BARS
ON STACK 5

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMI-
ANCE WITH PERMITTED PLANS AND SPECIFICATIONS

PREPARED AN INSPECTION REPORT

COPIES TO CHAMPLAIN TOWER
AQUA SHIELD
SURF SIDE

FIELD REPORT

[Signature]

SIGNATURE

7/29/02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI BEACH, FL

| | |
|------------------------------------|-------------------------------------|
| DATE <u>6-14-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>CLOUDY</u> | TEMP. <u>85</u> ° at <u>9:30 AM</u> |
| IN ATTENDANCE <u>FOREMEN</u> | |
| <u>6 WORKMEN</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK
IN PROGRESS AND OBSERVED THE FOLLOWING

STACK 9 - TAKE SOME PICTURES OF 2ND FLOOR
BELCONY. WORK MEN HAVE REMOVED
SLIDER AND INSTALLED DUST BARRIER
CONCRETE HAS BEEN CHIPPED. DOWELS
HAVE BEEN INSTALLED. READY TO POUR

STACK 6 - WORKMEN ARE CHIPPING ADDITIONAL
AREAS MARKED ON PREVIOUS ~~ON~~ INSPECTION
INSTALLING ADDITIONAL REINFORCEMENT
BAR.

WORKMEN HAVE COMPLETED REPAIRS TO
GARAGE EXIT AREA

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL
CONFORMANCE WITH THE PERMITTED PLANS AND
SPECIFICATIONS

PREPARED INSPECTION REPORT

COPIES TO CHAMPLAIN TOWERS
SURF SIDE
AQUA SHIELD

FIELD REPORT

Timothy S. Hill
7/29/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI BEACH, FL

| | |
|------------------------------------|-----------------------------------------------------------|
| DATE <u>6-12-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>SURF SIDE</u> | |
| CONTRACTOR <u>AQUA SHIELD</u> | OWNER |
| WEATHER <u>CLOUDY</u> | TEMP. ° at <u>85</u> ° at <u>9:30</u> <u>AM</u> <u>PM</u> |
| IN ATTENDANCE <u>FOREMEN</u> | |
| <u>5 WORKMEN</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS
AND OBSERVED THE FOLLOWING

12 STALK - 3RD FLOOR BELCONIE WORKMEN HAVE
CHIPPED AND SAND BLAST REINFORCEMENT
BAR. READY TO POUR. INSTALL ZINC

9 STALK - ALL AREAS WERE INSPECTED, MEASURED, AND
DEPICTED ON UNIT DRAWINGS. (AS-BUILTS)
UNIT 902 NEEDS CENTER SLIDING GLASS
DOOR REMOVED AND DUST BARRIER INSTALLED

6 STALK - MARKED REINFORCEMENT BARS AND ADD
ITIONAL AREAS IN NEED OF CHIPPING

4 STALK - PAINTERS PREPARING BELCONIES

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL
CONFORMANCE WITH THE PERMITTED PLANS AND
SPECIFICATIONS

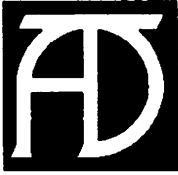
MEET WITH MANAGER

COPIES TO CHAMPLAIN TOWERS
SURF SIDE
AQUA SHIELD

FIELD REPORT

SIGNATURE

7/29/02



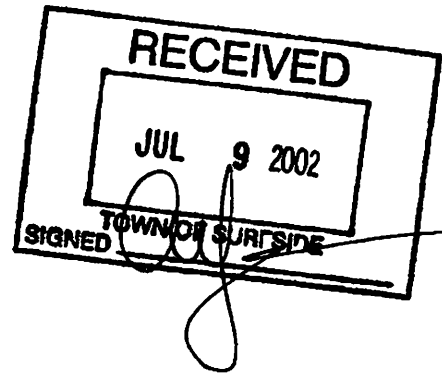
A. T. DESIGNS, INC.

CIVIL / STRUCTURAL ENGINEERING AND ENVIRONMENTAL SERVICES

June 11, 2002

Mr. Daniel B. Nieda, R. A., Building Official
TOWN OF SURFSIDE
BUILDING DEPARTMENT
9293 Harding Place
Surfside, Florida 33154

Re: Balcony Restoration and Waterproofing
Champlain Tower Condominium
8777 Collins Ave.
Miami Beach, FL 33154
Permit Number: 02-20

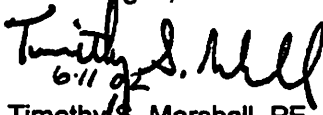


Dear Mr. Nieda,

A.T. Designs has been contracted by the Champlain Towers Condominium to conduct periodic inspections to the concrete restoration being performed to the building. The concrete restoration to the above referenced building is ongoing and periodic inspections have been performed to observe the work in progress. Inspection reports have been prepared detailing all observations and any field modification implemented during the completion of the work.

Included are copies of the inspection reports, concrete testing, and other various reports that are required for submission to your department. Please contact our office should there be any further questions.

Respectfully,
A.T. Designs, Inc.


6/11/02
Timothy S. Marshall, PE
FL. Reg. No. 41992

Permit No. 02-20

cc Champlain Towers
Aqua Shield
File



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|-------------------------------|--|-------------|------------------|
| DATE 6-6-02 | | PERMIT NO. | |
| PROJECT CHAMPLAIN TOWERS | | | |
| LOCATION MIAMI / SURF SIDE | | | |
| CONTRACTOR AQUA SHIELD | | OWNER | |
| WEATHER SUNNY | | TEMP. 90 | ° at 10:30 AM |
| IN ATTENDANCE FOREMEN | | | |
| 10 WORKMEN | | | |

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI

RECEIVED
JUL 9 2002
TOWN OF SURF SIDE
SIGNED

OBSERVATIONS AND/OR WORK IN PROGRESS:

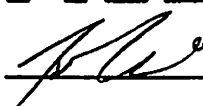
CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING

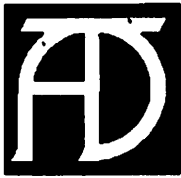
- 1) WORKMEN ARE CLEANING AROUND STALK B
- 2) WORKMEN HAVE STARTED MAKING REPAIRS AT GARAGE EXIT.
- 3) WORKMEN REPAIRING WALLS ON ROOF
- 4) TAKE SOME PICTURES OF A/C SUPPORT ON ROOF
- 5) WORKMEN CHIPPING ON STALK
- 6) TOLD FOREMAN HE NEEDS TO MOVE SMALL LIFT TO 12 STALK AND START WORKING ON UNIT 3

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS

FILLED OUT REPORT

COPIES TO
BARZ HADJIOU
AQUA SHIELD
SURF SIDE

FIELD REPORT

SIGNATURE
6-11-02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|-----------------------------|-------------|
| DATE 6-5-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION SURFSIDE | |
| CONTRACTOR AQUA SHIELD | OWNER |
| WEATHER CLOUDY | TEMP. 90 |
| IN ATTENDANCE FOREMEN | |
| WORKMEN | |

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI BEACH, FL JUL 9 2002
TOWN OF SURFSIDE
SIGNED

OBSERVATIONS AND/OR WORK IN PROGRESS

CONDUCTED AN ON SITE INSPECTION OF THE WORK IN PROGRESS AND OBSERVED THE FOLLOWING.

1) INSPECTED FORMS AND REBAR PLACEMENT ON STACK 9. ALL ITEMS MARKED ON PREVIOUS INSPECTION HAVE BEEN REPAIRED. SNAPPED SOME PICTURES. ALL AREAS READY TO POUR

2) WORKMEN ARE MARKING WALLS FOR PAINT COLORS

3) WORKMEN ARE CHIPPING ON # 7 STACK

4) WORKMEN ARE CLEANING JOB SITE

5) WORKMEN ARE PLACING CONCRETE TO AREAS OF STACK 9 PREVIOUSLY INSPECTED AND WERE OK

RECEIVED
JUL 9 2002
TOWN OF SURFSIDE
SIGNED

GENERAL NOTES:

ALL WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS

FILLED OUT REPORT

COPIES TO CHAMPLAIN TOWERS

SURF SIDE
AQUA SHIELD

FIELD REPORT

[Signature]

[Signature]
SIGNATURE 6.11.02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|-----------------------------|-----------------------|
| DATE 6-3-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION SURE SIDE | |
| CONTRACTOR AQUA SHIELD | OWNER |
| WEATHER SUNNY | TEMP. 85° at 11:00 AM |
| IN ATTENDANCE FOREMEN | |
| 10 WORKMEN | |

TO: CHAMPLAIN TOWERS

SURE SIDE

MIAMI BEACH, FL

RECEIVED

JUL 9 2002

OBSERVATIONS AND/OR WORK IN PROGRESS:

TOWN OF SURFSIDE

SIGNED

CONDUCTED AN ON SITE INSPECTION OF THE WORK
IN PROGRESS AND OBSERVED THE FOLLOWING

1) STACK 4 SLIDING GLASS DOORS ARE ALMOST COMPLETE
WORK MEN HAVE APPLIED SEALED TO REPAIRS AND
ARE REPAIRING ANY CRACKS IN STUCCO

2) STACK 5 COMPLETED MARKING AREAS IN NEED
OF CHIPPING

3) INSPECTED REBAR PLACEMENT AND FORMS ON
STACK 9 MARKED ADDITIONAL REPAIRS. WHEN
REPAIRS ARE COMPLETE READY TO POUR

4) WORKMEN ARE CLEANING JOBSITE ON NORTH
SIDE OF BUILDING

GENERAL NOTES: ALL WORK IS IN SUBSTANTIAL CONFORMANCE
WITH THE PERMITTED PLANS AND SPECIFICATIONS

PREPARED AN INSPECTION REPORT

COPIES TO

CHAMPLAIN TOWERS

SURE SIDE

AQUA SHIELD

FIELD REPORT

[Signature]

SIGNATURE

[Signature]
6-11-02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|-----------------------------|--------------------------|
| DATE 5-28-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION SURF SIDE | |
| CONTRACTOR ADVA SHIELD | OWNER |
| WEATHER CLOUDY | TEMP. 80 ° at 9:30 AM |
| IN ATTENDANCE TODD | |

TO: CHAMPLAIN TOWERS
SURF SIDE
MIAMI BEACH, FL

RECEIVED

JUL 9 2002

TOWN OF SURF SIDE

SIGNED

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE WORK
IN PROGRESS AND OBSERVED THE FOLLOWING

1) MARKED BELCONIES ON THE 8 STACK
SOUTH SIDE

2) MARKED OUT 1/2 OF STACK 5

3) WORKMEN STARTING TO CHIP ON 8 STACK
SOUTH

4) WORK MEN PRESURE WASHING 4 STACK

5) SLIDING GLASS DOOR TRACK HAVE BEEN
DELIVERED AND INSTULATION WILL START
(5-29-02)

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL
CONFORMANCE WITH THE PERMITTED PLANS AND
SPECIFILATIONS

FILLED OUT INSPECTION REPORT

COPIES TO CHAMPLAIN TOWERS
ADVA SHIELD
SURF SIDE

FIELD REPORT

[Signature]
6-11-02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|---------------|------------------|------------|------------------|
| DATE | 5-23-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWERS | | |
| LOCATION | SURFSIDE | | |
| CONTRACTOR | AQUA SHIELD | OWNER | |
| WEATHER | SUNNY | TEMP. | 80 ° at 10:30 AM |
| IN ATTENDANCE | TODD | | |

TO: CHAMPLAIN TOWERS

SURFSIDE

MIAMI BEACH, FL

RECEIVED

JUL 9 2002

OBSERVATIONS AND/OR WORK IN PROGRESS:

TOWN OF SURFSIDE

SIGNED

CONDUCTED AN ON SITE INSPECTION OF THE WORK
IN PROGRESS AND OBSERVED THE FOLLOWING

1) MARKED AREAS NEEDING TO BE CHIPPED
ON STACK 6

2) WORKMEN ARE CHIPPING ON STACK 8 SOUTH

3) WORKMEN INSTALLING SLIDING GLASS DOOR
PROTECTION ON STACK 6

4) WORKMEN ARE SAND BLASTING AND INSTALLING
NEW REBAR ON STACK 9

5) WORKMEN ARE CLEANING UP ON STACK 5 CORNER

GENERAL NOTES: ALL WORK INSPECTED IS IN SUBSTANTIAL
CONFORMANCE WITH THE PERMITTED PLANS AND
SPECIFICATIONS

COPIES TO CHAMPLAIN TOWERS
AQUA SHIELD
SURFSIDE

FIELD REPORT
SIGNATURE
6-11-02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURFSIDE

MIAMI BEACH, FL

RECEIVED

JUL 9 2002

TOWN OF SURFSIDE

SIGNED

| | |
|-----------------------------|----------------------------------|
| DATE 5.22-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION SURFSIDE | |
| CONTRACTOR AQUA SHIELD | OWNER |
| WEATHER CLOUDY | TEMP. ° at 9:00 AM 80 ° at PM |
| IN ATTENDANCE TODD | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE
WORK IN PROGRESS AND OBSERVED THE
FOLLOWING

STACK #9

PA - MARK REBAR TO BE CUT OFF - ADD #3 REBAR OUTSIDE
EDGE RAIL

911 - MARKED REBAR TO BE CUT OFF - ADD #3 REBAR OUTSIDE EDGE RAIL

910 - MARKED REBAR TO BE CUT OFF - NEED TO ADD #5 WITH 2' OVER
LAP ADD #3 TO EDGE ^{CHIP} OUT AT SLIDER CUT BACK REBAR
AND ADD POWERS WIRE TIE ALL ADD REBAR

909 - ADD #3 REBAR TO EDGE - CUT ALL MARKED REBAR

908 - MARKED REBAR NEEDING TO BE CUT - ADD #3 REBAR TO
EDGE OVER LAP AND TIE

907 MARKED REBAR NEEDING TO BE CUT - ADD #3 REBAR TO EDGE

906 MARK REBAR TO BE CUT - ADD #3 REBAR TO EDGE OVER LAP

905 MARK REBAR NEEDING TO BE CUT - ADD #3 REBAR TO EDGE OVER LAP

904 MARKED REBAR NEEDING TO BE CUT - ADD #3 REBAR TO EDGE OVER LAP

903 MARKED REBAR NEEDING TO BE CUT - ADD #3 POWERS TO EDGE OVER LAP

902 MARKED REBAR - NEED TO REMOVE SHUTTER (MIDDLE) CHIP SLAB - #3 REBAR EDGE

GENERAL NOTES:

COPIES TO

SURFSIDE

CHAMPLAIN TOWERS

AQUA SHIELD

FIELD REPORT

Timothy S. Hill
6.11.02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

Page 2

CHAMPLAIN TOWERS

| | |
|-------------------|--------------------------|
| DATE 5-22-02 | PERMIT NO. |
| PROJECT Page 2 | |
| LOCATION | |
| CONTRACTOR | OWNER |
| WEATHER | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

STACK 8 SOUTH SIDE

DEMARKEED OUT ~~SEA~~ BALCONIES

802

803

804

805

GENERAL NOTES:

COPIES TO

FIELD REPORT

6.11.02

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|-----------------------------|------------------------------------|
| DATE 5-20-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION MIAMI | |
| CONTRACTOR AQUA SHIELD | OWNER |
| WEATHER CLOUDY | TEMP. ° at 9:30 (AM) 80 ° at PM |
| IN ATTENDANCE | |
| | |
| | |

TO: CHAMPLAIN TOWERS
SURFSIDE
MIAMI BEACH FL

RECEIVED

JUL 9 2002

TOWN OF SURFSIDE

SIGNED: _____

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION AND
OBSERVED THE FOLLOWING

1) STUCCO WORK COMPLETED ON 404 AND 402

2) WORKMEN ARE CHIPPING BALCONIES ON
9 STACK

3) WORK MEN ARE PLACING REPAIR CEMENT INTO
FORMED AREAS ON STACK 5 CORNER BALCONIES

4) WORK ARE FINISHING STACKS 10 AND 11

5) WORKMEN ARE ERECTING PROTECTIVE ROOF
AT DRIVEWAY ENTRANCE

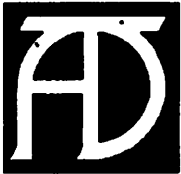
GENERAL NOTES: - ALL WORK INSPECTED IS IN SUBSTANTIAL CONFOR-
MANCE WITH THE PERMITTED PLANS AND
SPECIFICATIONS

- PREPARED AN INSPECTION REPORT

COPIES TO CHAMPLAIN TOWERS
SURFSIDE
AQUA SHIELD

FIELD REPORT

[Signature]
SIGNATURE
6-11-02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: Champlain towers
Surfside
Miami Beach, FL

| | |
|----------------------------|--------|
| RECEIVED | |
| JUL | 9 2002 |
| TOWN OF SURFSIDE SIGNED | |

OBSERVATIONS AND/OR WORK IN PROGRESS

| | |
|------------------------------------|--------------------------------------|
| DATE <u>5-15-02</u> | PERMIT NO. |
| PROJECT <u>Champlain towers</u> | |
| LOCATION <u>Miami Beach, FL</u> | |
| CONTRACTOR <u>Angie Steidel</u> | OWNER |
| WEATHER <u>Sunny</u> | TEMP. <u>85</u> ° at <u>11:45</u> AM |
| IN ATTENDANCE <u>Todd</u> | |
| <u>8 work men</u> | |

Conducted an on site inspection of the work in progress and observed the following

Stack 5 corner

806 - cut back rebar marked

705 - Add one piece #3 across railing to support marked

605 - move added clowels to top of existing rebar to support rail

205 - Add one piece #3 in front of rail to support

Stack 5 Forms are in place workmen repairing areas just marked when completed ready to pour.

Stack 12 Inspected unit 3 need to remove shutters from both south east sliders and Remove middle slider excavate Deck to expose rebar. Install protection wall over opening

GENERAL NOTES: All work inspected is in substantial conformance with the permitted plans and specification.

Meet with contractor
filed out report

COPIES TO Surfside

Champlain towers
Angie Steidel

FIELD REPORT

Timothy S. Hill
SIGNATURE 6.11.02



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|---------------|------------------|------------|----------------|
| DATE | 5-10-02 | PERMIT NO. | |
| PROJECT | Champlain Towers | | |
| LOCATION | Stacks 10, 4, 5 | | |
| CONTRACTOR | Agua Shield | OWNER | |
| WEATHER | Sunny | TEMP. | 85° at 9:30 AM |
| IN ATTENDANCE | Foreman | | |
| | 10 workers | | |

TO: Champlain Towers

Surf Side

Miami Beach

RECEIVED

JUL 9 2002

TOWN OF SURFSIDE

SIGNED

OBSERVATIONS AND/OR WORK IN PROGRESS:

Conducted an on site inspection of the work in progress and observed the following

Stack 10 - inspected forms and rebar placement told foremen to have work men install two tyrons on balcony edge forms all other work looks OK. Ready to pour cement is being hand mixed and placed

stack 4 - Sliding glass doors have been installed work men are apply water sealer shapes and forms have been removed

Stack 5 - Work men chipping areas marked on 5-6-02

GENERAL NOTES: 1) Noted one work men on lift with no hard hat informed foremen every one must wear their hard hat

2) Prepared inspection report

COPIES TO Surf side

Agua Shield

FIELD REPORT

Signature: Timothy S. Hill
6-11-02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|------------------------------------|--|-------------|-------------------------|
| DATE 5-8-02 | | PERMIT NO. | |
| PROJECT Champlain towers | | | |
| LOCATION Stacks 9, 11, 10, 5, 4 | | | |
| CONTRACTOR Aqua shield | | OWNER | |
| WEATHER | | TEMP. 80 | ° at 9:30 AM ° at PM |
| IN ATTENDANCE Todd | | | |
| 10 work men | | | |

TO: Champlain towers
Sunfside
Miami Beach, FL

| | |
|----------------------------|--|
| RECEIVED | |
| JUL 9 2002 | |
| FORM OF SURFSIDE SIGNED | |

OBSERVATIONS AND/OR WORK IN PROGRESS OF SURFSIDE

Stack 9 - Mark out areas to be chipped out, marked loose rails

Stack 11 - Inspected forms and rebar placement, inspected rebar for anti-corrosion agent

Stack 10 - Observed work men placing rebar and building forms

Stack 5 - observed work men chipping areas marked out on 5-6-02

Stack 4 - Work men installing sliding glass doors unit 401

GENERAL NOTES: All work is in substantial conformance with permitted plans and specifications

COPIES TO Sunfside

Aqua shield

FIELD REPORT

Timothy J. Hill
6.11.02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

RECEIVED

JUL 9 2002

TOWN OF SURFSIDE

SIGNED

TO: Champlain Towers
Surfside
Miami FL

| | |
|-----------------------------------------------|------------------------------------------|
| DATE <u>5-6-02</u> | PERMIT NO. |
| PROJECT <u>Champlain towers</u> | |
| LOCATION <u>5 stack, 12 stack, 4 stack</u> | |
| CONTRACTOR <u>Aqua Shield</u> | OWNER |
| WEATHER <u>Sunny</u> | TEMP. ° at 11:15 AM <u>85</u> ° at PM |
| IN ATTENDANCE <u>Tedd</u> | |
| <u>0 work men</u> | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

12 Stack Punch list

- PH1 - Remove tapcons, remove tape window frames, secure rails, ck ceiling
N/E corner
- PH2 - Secure rails, fill holes where tapcons removed, remove tape window frames
- 1112 - Secure rails, fill holes where tapcons removed, remove tape window frames,
ck crack in ceiling, concrete repair chipped
- 1012 - Secure rails, fill holes where tapcons removed.
- 912 - Secure rails, Replace missing balusters
- 812 - fill holes where tapcons removed, remove tape window frames
- 712 - Secure rails, fill holes where tapcons removed
- 612 - Secure rails, ck cracks ceiling
- 512 - Secure rails, remove tapcons from walls and ceilings, fill holes where
Tapcons removed
- 412 - Secure rails, fill holes where tapcons removed.
- 312 - Deck needs repairs rebar exposed, ck under shutter lower
track, secure rails, fill holes where tapcons removed.
- 212 - Secure rails, fill tapcon holes, replace missing baluster, remove tape
window frame
- 5-stack - Marked out areas to be chipped out (corner balconies)
- 4-stack - Inspected rebar placement, watched concrete pour (Truck # 2026)
- Slump 9.0, 4yds, 7000 PZPM, Ticket # 86156460, Batch 11:38 pump 12:38

GENERAL NOTES:

All work is in substantial conformance with the Permitted
Plans and specifications.

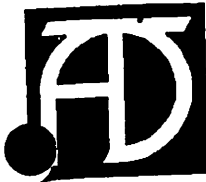
COPIES TO

Champlain towers

Aqua Shield

FIELD REPORT

Timothy S. Hill
6.11.02
SIGNATURE



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

RECEIVED

TO:

EDDIE

JUL 9 2002

TOWN OF SURFSIDE
SIGNED _____

| | | |
|---------------------------------------------------|------------------------------------|------------|
| DATE 23 Apr 02 | | PERMIT NO. |
| PROJECT Champlain Towers South | | |
| LOCATION 8777 Collins, Surfside | | |
| CONTRACTOR | | OWNER |
| WEATHER Partly Cloudy | TEMP. ° at 11:30 AM 82° ° at PM | |
| IN ATTENDANCE Todd - Foreman-Aqua Shield Corp. | | |
| Richard Paul - Bldg Manager | | |
| Fernando - Pioneer Concrete Pumping | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

Observed the pouring of concrete into the forms on 212 East side of bldg; & 204 on North side of building.

Observed the concrete testing and test cylinders being made by T.C. of Wingerter Labs.

During the movement of hoses from the East Side to the North Side there was some blockage and it took some time before the hoses were cleared.

Met and talked with Todd & Richard Paul.

GENERAL NOTES:

COPIES TO

FIELD REPORT

Larry D. Groger

SIGNATURE

CONCRETE TEST REPORT (Field Use Only)

Technician: Larry D. Groger
 Project Name: Champlain Towers South

Date: 23 Apr 02
 Project No.: _____
 (Ofc. Use Only) Sequence No.: _____

DESIGN DATA

Specified Strength: _____
 Specified Slump: 9:00
 Specified Air Content: _____

Mix Type: PRPM
 Mix Designation: 1206748
 Mix Supplier: Rinker

FIELD DATA

Truck No.: 5564
 Ticket No.: 85140228
 Cubic Yards: 9.00 of 9.00
 Water Added on Site: 3 gal
 Water Added By: L.D.G.
 Date of Placement: 23 Apr 02
 Location of Placement: _____

Weather: Partly Cloudy
 Air Temperature: 82°
 Batch Time: 10:51 a.m.
 Arrival Time: 11:13 a.m.
 Sample Time: 11:23 a.m.

(Todd-Foreman of Aqua Shield Corp.: Richard Paul-Bldg Manager

Fernando-Pioneer Concrete Pumping

Wingert Laboratories T.C.

TEST RESULTS

Slump: 8.50
 Concrete Temperature: _____

Air Content: _____
 Unit Weight: _____

| Lab I.D. No.: | | Compressive Strength Test Results | | | | | |
|------------------|----------------|-----------------------------------|-------------------|-------------------|------------------------|-------------------------------|---------------|
| Cylinder No. | Date Tested | Age (Days) | Diameter (In.) | Area (Sq. In.) | Failure Load (Lbs.) | Compressive Strength (PSI) | Break Type |
| A | | | | | | | |
| B | | | | | | | |
| C | | | | | | | |
| D | | | | | | | |
| E | | | | | | | |
| F | | | | | | | |

Locations of Cylinders -



A. T. DESIGNS, INC.

CIVIL / STRUCTURAL ENGINEERING AND ENVIRONMENTAL SERVICES

May 17, 2002

Mr. Daniel B. Nieda, R. A., Building Official
TOWN OF SURFSIDE
BUILDING DEPARTMENT
9293 Harding Place
Surfside, Florida 33154

Re: Balcony Restoration and Waterproofing
Champlain Tower Condominium
8777 Collins Ave.
Miami Beach, FL 33154
Permit Number: 02-20

*Dan -
What is
this for.
Our computer
includes the
permit was issued*

Dear Mr. Nieda,

A.T. Designs has been contracted by the Champlain Towers Condominium to conduct periodic inspections to the concrete restoration being performed to the building. The concrete restoration to the above referenced building is ongoing and periodic inspections have been performed to observe the work in progress. Inspection reports have been prepared detailing all observations and any field modification implemented during the completion of the work.

Included are copies of the inspection reports, concrete testing, and other various reports that are required for submission to your department. Please contact our office should there be any further questions.

Respectfully,
A.T. Designs, Inc.

Timothy S. Marshall
5/17/02
Timothy S. Marshall, PE
FL. Reg. No. 41992

Permit No. 02-20

cc Champlain Towers
Aqua Shield
File



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
SURFSIDE
MIAMI BEACH, FL.

| | |
|----------------------------------------|------------------------------------------------------|
| DATE <u>5/3/02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>BALCONY RESTORATION</u> | |
| CONTRACTOR <u>AQUASHEILD</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. <u>85</u> ° at <u>9</u> AM ° at <u> </u> PM |
| IN ATTENDANCE <u>WORKMEN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

02 STACK

PH02 - REMOVE TAPCON FROM WALL

1102 - PUNCHOUT COMPLETED

1002 - PUNCHOUT COMPLETED

902 - FIX RAIL BRACKET (WEST SIDE)

802 - PUNCHOUT COMPLETED

702 - PUNCHOUT COMPLETED

602 - PUNCHOUT COMPLETED

502 - PUNCHOUT COMPLETED

402 - PUNCHOUT COMPLETED

302 - PUNCHOUT COMPLETED

202 - FIX RAIL BRACKET.

12 STACK - PRESSURE CLEANING THE UNIT BALCONIES.

11 STACK - DEMOLING THE MARKED OUT EDGE REPAIR AREAS.

10 STACK - DEMOLING THE MARKED OUT EDGE REPAIR AREAS.

01 STACK - CLEANING UNIT BALCONIES.

GENERAL NOTES: - ALL WORK IS IN SUBSTANTIAL CONFORMANCE WITH
THE PERMITTED PLANS AND SPECIFICATIONS.

- MET WITH CONTRACTOR AND MANAGER.

- PREPARED AN INSPECTION REPORT.

COPIES TO

- CHAMPLAIN TOWERS

- AQUASHEILD.

FIELD REPORT

Timothy L. Hill
5/17/02

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|-----------------------------|--------------------------|
| DATE 5/3/02 | PERMIT NO. 12 |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION 03 STACK | |
| CONTRACTOR AQUASWELD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE WORKMEN | |
| | |
| | |

TO: CHAMPLAIN TOWERS
SURFSIDE
MIAMI BEACH, FL.

OBSERVATIONS AND/OR WORK IN PROGRESS: 03 STACK

- PH01 - PUNCHOUT COMPLETED
- 1103 - FIX WEST RAIL BRACKET AT WALL.
- 1003 - PUNCHOUT COMPLETED
- 903 - PUNCHOUT COMPLETED
- 803 - FIX RAIL POST SOCKET (NORTH SIDE).
- 703 - PUNCHOUT COMPLETED
- 603 - FIX RAIL POST SOCKET (NORTH SIDE)
- 503 - FIX RAIL POST BRACKET (WEST SIDE)
- 403 - FIX 2 RAIL BRACKETS (MARKED)
- 303 - FIX BRACKET (EAST SIDE).
 - FIX DENTED RAIL CAP.
 - SHUTTERS ARE MISSING.
 - CLEAN DEBRIS FROM SHUTTER TRACK.
- 203 - FIX RAIL BRACKET (EAST SIDE)
 - REMOVE PARLONS FROM WALLS.
 - FIX DENT IN RAIL CAP.
- ENTIRE 3 STACK - REMOVE ANY MUD FROM RAILS AND BLUE TAPE FROM WINDOWS.
- 04 STACK
 - INSPECTED UNIT 404. HAD WORKMEN ADD 5 BARS.
 - OBSERVED CORRECTION, 404 IS READY FOR CONCRETE PLACEMENT.

GENERAL NOTES: - ALL WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATION.
- MET WITH THE CONTRACTOR AND MANAGER.
- PREPARED AN INSPECTION REPORT.

COPIES TO

- CHAMPLAIN TOWERS
- AQUASWELD

FIELD REPORT

Timothy S. Hill
5/17/02

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

CHAMPLAIN TOWERS

SURFSIDE

MIAMI BEACH, FL

| | |
|-----------------------------|--------------------------|
| DATE 5/11/02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION MIAMI, FL. | |
| CONTRACTOR AQUASHEILD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE 8 WORKMEN | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

10 STACK - THE WORKMEN ARE DEMOING THE MARKED OUT EDGE REPAIR AREAS.

- INSPECTED AND MARKED OUT ADDITIONAL REPAIR AREAS.

11 STACK - THE WORKMEN ARE DEMOING THE MARKED OUT EDGE REPAIR AREAS.

- INSPECTED AND MARKED OUT ADDITIONAL REPAIR AREAS.

12 STACK - THE WORKMEN ARE REMOVING TILE AT SELECTED UNIT BALCONIES.

04 STACK - INSPECTED AND MARKED OUT ADDITIONAL REPAIR AREAS.

- WORKMEN ARE INSTALLING BULKHEAD AT FORMED AREAS.

- INSPECTED 404. NOT READY TO POUR.

GENERAL NOTES: - ALL WORK IS IN SUBSTANCIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS.

- MET WITH THE CONTRACTOR.

- PREPARED AN INSPECTION REPORT.

Trinity S. Hill
5/17/02

COPIES TO

- AQUASHEILD

- CHAMPLAIN TOWERS

FIELD REPORT

[Signature]

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWER
COLLINS AVE

| | | | |
|---------------|-----------------|------------|--------------------|
| DATE | 4-22-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWER | | |
| LOCATION | COLLINS AVE | | |
| CONTRACTOR | CONTINENTAL | OWNER | |
| WEATHER | SUNNY | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE | TODD | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE
WORK IN PROGRESS AND OBSERVED THE
FOLLOWING

EXAMINED STACK ID AND MARKED OUT
AREAS FOR INVESTIGATION. THE EXTREME
ENDS OF BALCONIES NEEDED FURTHER
INVESTIGATION WHEN STAGES ADJUSTED

THE NORTH BALCONIES ARE SCHEDULED TO
HAVE CONCRETE PURED TUES. AT 3:00 P.M.
ON SITE

CHECKED QTY. PER PLAN 12 WEST FOR BILLING

(ADD NETTING TO CANOPY TO POOL AREA, COMPLETE
WALKWAY WALLS AND PROTECT PLANTS WITH
ADDITIONAL NETTING)

GENERAL NOTES:

MEET WITH CONTRACTOR

PREPARED INSPECTION REPORT

COPIES TO

CONTINENTAL

CHAMPLAIN TOWER

FIELD REPORT

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: Champlain Tower
Collins Ave

| | |
|-----------------------------------|--------------------------|
| DATE <u>4-19-02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWER</u> | |
| LOCATION <u>COLLINS AVE</u> | |
| CONTRACTOR <u>CONTINENTAL</u> | OWNER |
| WEATHER <u>SUNNY</u> | TEMP. ° at AM ° at PM |
| IN ATTENDANCE <u>GILBERTO</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE
WORK IN PROGRESS AND OBSERVED THE
FOLLOWING

UNIT #402 WORKERS HAVE INSTALLED ANODES
AT REINFORCING STEEL, RECAST AND CHECK
REINFORCING STEEL 24 HR. WINDOW FOR
COATING, CLEAN AND HYDRATE FORMS
PRIOR TO CONCRETE PLACEMENT

UNIT #1202 WORKERS INSTALLED ANODES
PREPARE AS PER UNIT #402

UNIT #402 CHECK RAIL POST AND CORRECT
3 POSTS AS DIRECTED

STACK #11 CHECKED AND MARKED FOR
EXCAVATION, MARKED TILE WHICH
INDICATED POTENTIAL DAMAGE TO
BALCONY REINFORCING STEEL AND OR
CONCRETE SURFACE.

GENERAL NOTES:

MEET WITH CONTRACTOR

PREPARED INSPECTION REPORT

COPIES TO

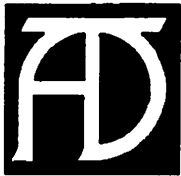
CONTINENTAL

CHAMPLAIN TOWER

Timothy J. Hall
FIELD REPORT

TJD

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

Champlain Towers
Collins Ave

| | | | |
|---------------|------------------|------------|--------------------|
| DATE | 4-16-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWERS | | |
| LOCATION | COLLINS AVE | | |
| CONTRACTOR | CONTINENTAL | OWNER | |
| WEATHER | SUNNY | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE | TODD | | |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE
WORK IN PROGRESS AND OBSERVED THE
FOLLOWING

STACK #3 APPROVED 1, 4 AND 5 GRIND
AND CAULK PRIOR TO APPLYING WATER
PROOFING

REMOVE ANY REMAINING TILE AT SGT
EDGES AND GRIND.

FOLLOW APPROVED SPECS ON INSTALLATION
OF WATERPROOFING.

ALL WORK APPEARS TO BE SUBSTANTIAL
COMPLIANCE WITH APPROVED PLANS AND
SPECIFICATIONS

GENERAL NOTES:

MET WITH CONTRACTOR
PREPARED INSPECTION REPORT

Timothy J. Hill
5/17/02

COPIES TO

CONTINENTAL
CHAMPLAIN TOWER

FIELD REPORT

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|-----------------------------|--------------------------|
| DATE 4-15-02 | PERMIT NO. |
| PROJECT Champlain Towers | |
| LOCATION Collins Ave | |
| CONTRACTOR CONTINENTAL | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE TODD | |
| | |
| | |

TO: Champlain Towers
Collins Ave.

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF THE
WORK IN PROGRESS

CHECKED PH 2-9 AND 12 STACK FOR REPAIR
AREAS APPROVED TO INSTALL CONCRETE
1104 AND 604 PACE CONCRETE 4/15/02

CHECKED 212 FOR POURING OF CONCRETE
APPROVED FOR POUR CLEAN & HYDRATE PRIOR
TO CONCRETE PLACEMENT

FINAL PUNCH FOR 2 STACK TO WATERPROOF
802 AND MAKE REPLACEMENT OF 12'0"
WATERPROOF 126 D'

MARKED OUT TOP FLOOR AT WEST SIDE
OF PENTHOUSE 1 / STUCCO AND
CHECKED OUT STUCCO ON 5 FLOOR AND
CORNER OF WALL AT SOUTH SIDE OF
STACK 12 AREA GET APPROVAL TO REPAIR

GENERAL NOTES:

MEET WITH CONTRACTOR
PREPARED INSPECTION REPORT

COPIES TO

CONTINENTAL
CHAMPLAIN TOWERS

FIELD REPORT
T. J. [Signature]
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|---------------------------------|--------------------------|
| DATE 4/3/02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION BALCONY RESTORATION | |
| CONTRACTOR AQUASHEILD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE 16 WORKMEN | |
| | |
| | |

TO: CHAMPLAIN TOWER
BALCONY RESTORATION
SURFSIDE, MIAMI, FL.

OBSERVATIONS AND/OR WORK IN PROGRESS:

- 12 STACK: WORKMEN ARE STUCCOING REPAIR AREAS.
- 04 STACK: WORKMEN ARE FORMING REPAIR AREAS.
- WORKMEN ARE INSTALLING NEW REINFORCEMENT AT REPAIR AREAS
 - WORKMEN ARE COATING ALL REINFORCEMENT AT REPAIR AREAS WITH AN ANTI-CORROSION/MORTAR BONDING AGENT.
- 404 - THIS BALCONY WILL BE A TOTAL REPLACEMENT
- ADD SECOND MAT OF STEEL REINFORCEMENT.
 - NEED TO DEMO REMAIN SECTION.
- 204 - ADD SECOND MAT OF STEEL REINFORCEMENT.
- SANDBLAST CORRODED REINFORCEMENT AT ~~WESTERN~~ NORTHWESTERN DOOR WAY.
 - INSTALL CP ANODES AT DOORWAY 3' ON CENTER.
- MET WITH THE CONTRACTOR AND THE MANAGER AT THE WEEKLY COORDINATION MEETING.
- PREPARED AN INSPECTION REPORT.

GENERAL NOTES: ALL WORK IS IN SUBSTANCIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS

COPIES TO

- AQUASHEILD
- CHAMPLAIN TOWERS

FIELD REPORT

Signature: Timothy J. [Signature]

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

Champlain Towers
Miami Bch

| | | | |
|---------------|------------------|------------|---------------|
| DATE | 4-9-02 | PERMIT NO. | |
| PROJECT | Champlain Towers | | |
| LOCATION | Miami Bch | | |
| CONTRACTOR | CONTINENTAL | | OWNER |
| WEATHER | WINDY | | TEMP. ° at AM |
| IN ATTENDANCE | TODD | | ° at PM |
| | | | |
| | | | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

INSPECTED BALCONIES ON STACK #4
FOR PLACEMENT OF CONCRETE

UNITS INSPECTED WERE PH 1, # 11
10 # 9 # 8 # 7 # 6 # 5 # 4 # 3 AND
2.

UNITS APPROVED FOR CONCRETE PLACEMENT
PH 1, # 10 # 9 # 8 # 7 # 5 # 3 AND # 2

INSURE ALL AREAS TO BE POURED ARE
CLEARED PRIOR TO CONCRETE PLACEMENT
AND REINFORCING STEEL PAINTED WITH
COATING WITHIN 24 HOUR WINDOW.

CHECK ALL RAIL POST TO INSURE REINFORCING
STEEL SURROUNDS POSTS AND NO CONTACT
IS MADE AT POST.

INSURE NO "BORING" OF STEEL AT POUR.

GENERAL NOTES: MAINTAIN PROPER COVERAGE AND SPATULATION
MEET WITH CONTRACTOR
PREPARED INSPECTION REPORT

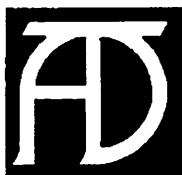
COPIES TO

CONTINENTAL

CHAMPLAIN TOWER

FIELD REPORT

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|---------------|-----------------|------------|---------------|
| DATE | 04-5-02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWER | | |
| LOCATION | COLLINS AVE | | |
| CONTRACTOR | CONTINENTAL | | OWNER |
| WEATHER | SUNNY | | TEMP. ° at AM |
| IN ATTENDANCE | TODD | | ° at PM |
| | | | |
| | | | |

TO: CHAMPLAIN TOWER
COLLINS AVE

OBSERVATIONS AND/OR WORK IN PROGRESS:

STACK #3 UNITS 703, 803, 1003 AND PH 1
ARE COMPLETE AT AREAS FORMED WITH
REINFORCING STEEL IN PLACE, PREPARED AND
READY FOR CONCRETE PLACEMENT

STACK #4 REINSPECT MONDAY 4-8-02

STACK #12 INSPECTED FOR AREAS TO BE
EXCAVATED TO CHECK FOR DAMAGE
AREAS MARKED OUT BY INSPECTOR

STACK #12 CUT OFF TILE AT PENTHOUSE
1 FURN WITH EDGE OF BALCONY

STACK #4 REPAIR ELECTRIC CONDUIT AT
WEST BOTTOM EDGE OF SLIDING GLASS
DOOR ON BALCONY

GENERAL NOTES:

MEET WITH CONTRACTOR
PREPARED INSPECTION REPORT

COPIES TO

CONTINENTAL
CHAMPLAIN TOWER

FIELD REPORT

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|---------------|------------------|------------|--------------------|
| DATE | 4-2-02 | PERMIT NO. | |
| PROJECT | Champlain Towers | | |
| LOCATION | Collins Ave | | |
| CONTRACTOR | Continental | OWNER | |
| WEATHER | Sunny | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE | Todd | | |
| | | | |
| | | | |

TO: Champlain Towers South
Collins Ave

OBSERVATIONS AND/OR WORK IN PROGRESS:

- 1) STACK #2 RAILS HAVE TO BE CRAWLED
MATERIAL FROM PREVIOUS CONTRACTOR.
RAILING NEED REPAIRS AT VARIOUS JOINTS
RIVETS ARE MISSING OR LOOSE AND
JOINTS HAVE BEEN REPAIRED WITH SMALL
PLATES AND DRYWALL SCREWS
SOME Drip EDGE AT STUCCO BOTTOMS
NOT UNIFORM.
SOME WALLS HAVE CONCRETE FROM
PREVIOUS POURS.

- 2) STACK #3
 1. CLEAN STEEL AND RECOAT AS NECESSARY
 2. REPAIR AREAS MARKED OUT.
 3. STUCCO BLADE CUT UNDERSIDE OF BALCONY
 4. POOR AFTER REWORK

- 3) STACK #4
 - 1) MEASURED QTY. OF CONCRETE DEMOLISHED
AREAS
 - 2) MARKED OUT DOWELS TO ADD
 - 3) FORM STEEL BOX AT VALPOST
 - 4) MAKE DECISION ON ISLAND TO REMOVE

GENERAL NOTES:

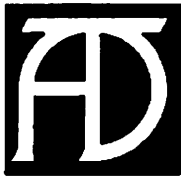
COPIES TO

CONTINENTAL

Champlain Towers S.

FIELD REPORT

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO:

Champlain Towers
Collins Ave

| | |
|-----------------------------|--------------------------|
| DATE 3-28-02 | PERMIT NO. |
| PROJECT Champlain Towers | |
| LOCATION Miami: Collins | |
| CONTRACTOR Continental | OWNER |
| WEATHER Sunny | TEMP. ° at AM ° at PM |
| IN ATTENDANCE Todd | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED AN ON SITE INSPECTION OF
THE WORK IN PROGRESS AND OBSERVED
THE FOLLOWING

STACK-12 WORKMEN ARE PLACING CONCRETE
IN FORMED AREAS. (EXCEPT 1202)

STACK-2 WORKMEN ARE APPLYING STUCCO
TO FINISHED BALCONIES

STACK-3 WORKMEN ARE EXCAVATING MARKED
OUT AREAS BY ENGINEER

STACK-4 WORKMEN ARE PLACING REINFORCING
STEEL AND INSTALLING FORMS

MET WITH CONTRACTOR

PREPARED INSPECTION REPORT

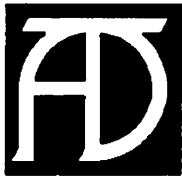
GENERAL NOTES:

COPIES TO

CONTINENTAL

CHAMPLAIN TOWER

FIELD REPORT
T.D.
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
CONCRETE RESTORATION
MIAMI BEACH, FL

| | |
|---------------------------------|--------------------------|
| DATE 3/22/02 | PERMIT NO. .. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION BALCONY RESTORATION | |
| CONTRACTOR AQUASHEILD | OWNER |
| WEATHER SUNNY/RAIN | TEMP. ° at AM ° at PM |
| IN ATTENDANCE 11 WORKMEN. | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

- MET WITH THE BUILDING OFFICIAL AT THE BUILDING DEPT. TO DISCUSS THE WORK IN PROGRESS
- INSPECTED THE 12 STACK FOR REPAIR AREAS THAT ARE READY TO POUR. VARIFIED UNIT QUANTITIES.
- OK. TO POUR IDENTIFIED AREAS (SEE FORMANS BALCONY LOG) BUT STILL NEED TO BE CHECKED BY BUILDING DEPT. INSPECTOR ON MONDAY,
- OTHER AREAS OF CORRECTION WILL BE CHECKED AGAIN ON MONDAY
- WORKMEN ARE CORRECTING IDENTIFIED REPAIR AREAS.
- PREPARED AN INSPECTION REPORT.

GENERAL NOTES: ALL WORK IS IN SUBSTANCIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS

Timothy W. ...

COPIES TO - CHAMPLAIN TOWER
AQUASHEILD

FIELD REPORT

5/17/02

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
8777 COLLINS AVE.
MIAMI FL.

| | |
|-----------------------------|--------------------------|
| DATE 3-26-02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION UNIT BALCONIES | |
| CONTRACTOR AQUA-SHIELD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

CONDUCTED INSPECTION OF ON SITE WORK
FOR BALCONY RESTORATION

* BOZ 1. CLEANED AND PAINTED DEBRIS
AT DAMAGED AREAS

2. REMOVED BURNING DEBRIS AT
EAST EDGE

3. EXCAVATED AND PREPARED
MARKED OUT AREAS

4. ADD 3 REINFORCING STEEL
BARS AS REQUIRED AND
INSTALLED WITH EPOXY

APPROVED TO POUR CONCRETE

GENERAL NOTES:

WORK IS IN SUBSTANTIAL COMPLIANCE
WITH PERMITTED PLANS AND SPECS
MET WITH CONTRACTOR
PREPARED IN INSPECTION REPORT

COPIES TO

CHAMPLAIN

AQUA-SHIELD

FIELD REPORT

1. [Signature]
5/17/02
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | | | |
|---------------|-----------------|------------|--------------------|
| DATE | 3/25/02 | PERMIT NO. | |
| PROJECT | CHAMPLAIN TOWER | | |
| LOCATION | BALCONIES | | |
| CONTRACTOR | AQUASHEILD | OWNER | |
| WEATHER | SUNNY | TEMP. | ° at AM ° at PM |
| IN ATTENDANCE | 12 WORKMEN | | |
| | | | |
| | | | |

TO: CHAMPLAIN TOWER
BALCONY RESTORATION
MIAMI BEACH, FL

OBSERVATIONS AND/OR WORK IN PROGRESS:

P1101-04 STACK - DOWELL 4 MARKED AREAS, ADD PERIMETER REBAR, FORM REPAIR AREAS.

1104 - NEED TO DOWELL IN 31 REBARS, ADD PERIMETER REBAR, FORM REPAIR AREAS, DEMO MARKED OUT REPAIR AREAS.

12 STACK

- INSPECTED ALL REPAIR AREAS ON FLOOR 8 - 2 OK. TO POUR IDENTIFIED AREAS.

212 - NEED TO DEMO, ADD REBAR AND FORM REPAIR AREAS.

- MET WITH CONTRACTOR.

- TOWN BUILDING INSPECTOR NEVER SHOWED UP FOR INSPECTION.

- PREPARED AN INSPECTION REPORT.

GENERAL NOTES: ALL WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS

COPIES TO

- CHAMPLAIN TOWER

- AQUASHEILD

FIELD REPORT

SIGNATURE

Timothy S. Hill

5/17/02



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|-----------------------------------------------|--------------------------|
| DATE 3/21/02 | PERMIT NO. |
| PROJECT CHAMPLAIN TOWERS | |
| LOCATION 8888 88 th STR., miami | |
| CONTRACTOR AQUASHEILD | OWNER |
| WEATHER SUNNY | TEMP. ° at AM ° at PM |
| IN ATTENDANCE GILBERTO AND 10 WORK | |
| | |
| | |

TO: CHAMPLAIN TOWERS
CONCRETE RESTORATION
miami, FL.

OBSERVATIONS AND/OR WORK IN PROGRESS:

- PH2 (12 STACK) - OK. TO POUR ALL REPAIR AREAS.
PH1 (12 STACK) - MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS. NO POURS
1112 - OK. TO POUR 3 AREAS. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.
1012 - OK. TO POUR 2 AREAS. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.
912 - OK. TO POUR 2 AREAS. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.
812 - OK TO POUR 7 REPAIR AREAS. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.
712 - OK. TO POUR 1 REPAIR AREA. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.
612 - OK. TO POUR ALL REPAIR AREAS. NEED TO DEMO SURFACE SPALL.
512 - OK. TO POUR 2 REPAIR AREAS. NEED TO ADD REBAR AT MARKED OUT RAIL POST AREAS.
412 - OK. TO POUR 2 REPAIR AREAS. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.
312 - OK. TO POUR 2 REPAIR AREAS. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.
212 - OK. TO POUR 1 REPAIR AREAS. MARKED OUT AREAS THAT NEED REBAR AT RAIL POST AREAS.

GENERAL NOTES: REBAR AT RAIL POST AREAS.

- MET WITH CONTRACTOR AND MANAGER
- PREPARED AN INSPECTION REPORT

COPIES TO

- AQUASHEILD
- CHAMPLAIN TOWERS

Timothy S. Hill
FIELD REPORT
EL
SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

TO: CHAMPLAIN TOWERS
8777 COLLINS AVE
MIAMI, FL.

| | |
|------------------------------------|--------------------------|
| DATE <u>3/13/02</u> | PERMIT NO. |
| PROJECT <u>CHAMPLAIN TOWERS</u> | |
| LOCATION <u>UNIT BALCONIES</u> | |
| CONTRACTOR <u>AVQUASHEIL</u> | OWNER |
| WEATHER <u>SNYNY</u> | TEMP. ° at AM ° at PM |
| IN ATTENDANCE <u>9 - MEN</u> | |
| | |
| | |

OBSERVATIONS AND/OR WORK IN PROGRESS:

- 802 - CLEAN AND PAINT REBAR AT MARKED OUT REPAIR AREAS.
- CUT BURNING REBAR AT EAST EDGE REPAIR
 - DEMO MARKED OUT REPAIR AREAS
 - DOWELL REBAR IN 3 LOCATIONS
- 1103 - DEMO THE MARKED OUT REPAIR AREAS
- 1003 - DEMO THE MARKED OUT REPAIR AREAS.
- 903 - 203 - DEMO MARKED OUT REPAIR AREAS.
- 403 - DEMO RAIL POST POCKETS
- ADD SHORING UNDER DECK PRIOR TO DEMO WORK.
- 203 - REMOVE FURNITURE FROM UNIT BALCONY.
- PH04 - DEMO MARKED OUT AREAS, DOWELL REBAR AT MARKED AREAS.
- 1404 - DEMO MARKED OUT REPAIR AREAS.
- 404 - MARKED OUT ENTIRE BALCONY TO BE REMOVED. MARKED OUT ALL DOWELS. UNIT NEEDS TO BE INVADEN. CONDO ASSOC. DONT WANT ANY INVASION.
- 12 STACK: THE WORKMEN ARE SAMBLASTING REBAR AND PAINTING REBAR.

GENERAL NOTES: - ALL WORK IS IN SUBSTANCIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATIONS

- MET WITH CONTRACTOR
- PREPARED THE INSPECTION REPORT. Timothy S. Smith 5/17/02

COPIES TO

- CHAMPLAIN
- AVQUASHEIL

FIELD REPORT

SIGNATURE



A. T. DESIGNS, INC.

ENGINEERING & CONSULTING SERVICES

300 PROSPERITY FARMS RD., SUITE G
NORTH PALM BEACH, FL 33408
PHONE (561) 881-7280 FAX (561) 881-0201

| | |
|----------------------------|--------------------------|
| DATE 3/12/02 | PERMIT NO. |
| PROJECT SURFSIDE | |
| LOCATION | |
| CONTRACTOR AQUASHEILD | OWNER |
| WEATHER | TEMP. ° at AM ° at PM |
| IN ATTENDANCE 8 WORKMEN | |
| | |
| | |

TO: SURFSIDE
8777 COLLINS AVE
MIAMI BEACH, FL

OBSERVATIONS AND/OR WORK IN PROGRESS:

- CALL MIAMI BLDG DEPT. TO GET APPROVAL TO REMOVE RAILINGS.
- PH2 - ADD REBAR AT EDGE OF NORTHREPAIR AREA, CLEAN (SANDBLAST) REBAR AT ALL (3) THREE LOCATIONS, PAINT.
- PH1 - ADD REBAR AT ALL RAIL POST LOCATIONS (#3 OR #4 BAR)
 - CLEAN REBAR AND PAINT AT MARKED OUT AREAS.
- 1112 - CLEAN REBAR AND PAINT AT MARKED OUT AREAS.
 - ADD REBAR AT RAIL POST AREA (ALL)
- 1012 - CLEAN REBAR AND PAINT AT MARKED OUT AREAS.
 - ADD REBAR AT RAIL POST AREA (ALL)
- 912 - CLEAN REBAR AND PAINT AT MARKED OUT AREAS.
 - DEMO MARKED OUT REPAIR AREAS
 - ADD REBAR AT RAIL POST AREAS.
 - DOWEL MARKED OUT AREAS.
- 812 - CLEAN REBAR AND PAINT AT MARKED OUT AREAS
 - ADD REBAR AT ALL RAIL POST AREAS
 - ADD REBAR AT MARKED AREA AT RADII'S.
- 712 - CLEAN REBAR AND PAINT AT MARKED OUT AREAS.
 - ADD REBAR AT RAIL POST.
 - DOWELL REBAR AT MARKED AREAS.
- 612 - CLEAN REBAR AND PAINT MARKED OUT REBAR.

GENERAL NOTES: -ADD REBAR AT RAIL POST

-ALL WORK IS IN SUBSTANTIAL CONFORMANCE WITH THE PERMITTED PLANS AND SPECIFICATION

COPIES TO

Timothy S. Hill
5/17/02
FIELD REPORT
[Signature]
SIGNATURE

**VILLAGE OF KEY BISCAYNE
BUILDING, ZONING, AND PLANNING DEPARTMENT**

SPECIAL INSPECTOR INSPECTION LOG







PROJECT: CHAMPLAIN TOWERS SOUTH
 STREET ADDRESS: 195 SUNRISE DRIVE
 CONTRACTOR: AQUA-SHIELD CORPORATION
 PERMIT NO.: 02-20
 PLANS TITLED: CONCRETE RESTORATION
 PREPARED BY: RAFAEL M. ROJAS, P.E., PH.D.
CONSULTING ENGINEERS, INC.
 DATED: November 28, 2001

INSPECTOR'S NAME
 OR NAME OF FIRM: Rafael M. Rojas, P.E., Ph.D.
Consulting Engineers, Inc.

FIRST INSPECTION: November 28, 2001
 LAST INSPECTION: _____

All inspections performed by the special inspector under the above permit must be logged-in on the same day of the inspection on this form which must be displayed in a convenient location on the site for reference by officials of the Village of Key Biscayne Building, Zoning, and Planning Department. This completed form must be submitted to the Building, Zoning, and Planning Department with the Statement of Compliance required under Section 305.3, South Florida building Code, upon completion of all work in order to obtain a final inspection and Certificate of Use and Occupancy. A separate log is to be maintained for each building or permit.

INSPECTION PROGRESS REPORT

| WORK DATE | INSP. DATE | CONSTRUCTION PHASE | WORK DESCRIPTION | INSPECTOR'S APPROVED | SIGNATURE REJECTED* |
|-----------|------------|--------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------|
| | 11/28/01 | N/A | Drop No. 12. Mark Areas Of Deteriorated Concrete To Be Removed. |  | |
| | 11/29/01 | N/A | Drop No. 2. Mark Areas Of Deteriorated Concrete To Be Removed. |  | |
| | 11/29/01 | N/A | Drop No. 3. Mark Areas Of Deteriorated Concrete To Be Removed. |  | |
| | 11/30/01 | N/A | Drop No. 4. Mark Areas Of Deteriorated Concrete To Be Removed. |  | |
| | 12/17/01 | N/A | Drop No. 2. Removal of Areas of Deteriorated Concrete. |  | |
| | 12/17/01 | N/A | Drop No. 3. Removal of Areas of Deteriorated Concrete. |  | |

03/14/2002 11:48 3058557800

CHAMPLAIN TOWERS S.

[illegible]

* Any remarks concerning the approved or rejected work may be made on the reverse side of this form or on a separate piece of paper and attached hereto.



A. T. DESIGNS, INC.

CIVIL / STRUCTURAL ENGINEERING AND ENVIRONMENTAL SERVICES

Lot 0 Block 4 NB2A
#02-20

OK To Job File
3/22/02

March 20, 2002

Mr. Daniel B. Nieda, R.A., Building Official
TOWN OF SURFSIDE
BUILDING DEPARTMENT
9293 Harding Place
Surfside, Florida 33154

Re: Balcony Restoration and Waterproofing
Champlain Tower Condominium
8777 Collins Ave.
Miami Beach, FL 33154
Permit Number: 02-20

Dear Mr. Nieda,

The ongoing concrete restoration work being performed by Aqua-Shield Corporation, to the above mentioned unit balconies, has been ongoing since November 2001. As a result of the request for changing of the present engineer of record, I, Timothy S. Marshall, PE, will replace Rafael Rojas, PE to oversee the remaining concrete restoration work to the unit balconies. Complete and comprehensive repair and restoration specifications have been prepared at the request of your office. Signed and sealed copies of the project specifications have been included with this letter.

The portion of work completed under the supervision of the previous engineer of record has been certified and a copy of that certification has also been included with this letter. The areas of ongoing restoration, which have not been certified to date, shall be inspected and certified under our supervision. The previously completed and certified restoration work includes stacks 01 and 02. The areas of ongoing work are to stacks 03, 04, and 12. Some of the areas in 03 and 04 stack still required additional remedial restoration procedures performed, which shall be completed under my supervision.

The procedure(s) for the completion of the remaining portion of restoration work are as follows:

1. All areas of deterioration shall be identified and marked out by the Engineer.
2. Those areas shall be excavated (chipped), down to the oxidized steel reinforcement. The perimeter of the areas shall be saw cut to prevent any feathered edges. Once completed it shall be inspected.



3. The exposure of the deteriorated steel reinforcement shall extend until clean reinforcement is exposed. If there are cases where the chasing of the oxidized steel reinforcement is prohibited, sacrificial zinc anode shall be incorporated into the repair to arrest the continuation of the deterioration of the steel reinforcement.
4. In the case where there is minimal concrete coverage over the reinforcement bars, alternative measure shall be taken to insure the prolong protection of the steel reinforcement.
5. The exposed reinforcement shall then be sand blasted and coated with an anti-corrosion/bonding agent. Prior to the placement of the coating materials, the prepared steel shall be inspected.
6. The approved repair mortars will then be placed in the prepared areas and cured in accordance with manufacturers recommendations and industry standards. The engineer shall be present during the placement of the repair mortars, in accordance with Florida Statute.
7. The finish surfaces will then receive an application of a migrating corrosion inhibitor (MCI) to prevent future deterioration of the concrete and steel reinforcement.

The work on the 03, 04, and 12 stacks shall be completed immediately and then the focus will move to the poolside stacks (09, 10, and 11). Once completed the remaining balconies shall be repaired. The inspection procedures outlined by the Town of Surfside Building Department shall be strictly followed and a log of our inspections will be kept current. An addition to the inspection log, we shall submit bi-weekly certification letter, along with our field inspection reports.

I fully understand the issues related to the completion of the previous concrete restoration work and will work diligently to complete the remaining work. Please contact our office should there be any further questions.

Respectfully submitted,
A.T. Designs, Inc.



3/20/22

Timothy S. Marshall, PE
Florida Reg. No. 41992

cc Nancy Levin, President
Steve Lesser, Becker & Poliakoff
Dave Schulteis, Aqua-Shield Corp.
File



02-20

**CHAMPLAIN TOWERS SOUTH
CONDOMINIUM ASSOCIATION, INC.
CONCRETE RESTORATION
PROJECT MANUAL**

March 2002

PREPARED BY:
Timothy S. Marshall, PE
300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408
Phone: (561) 881-7280
Fax: (561) 881-0201
e-mail: atd@atdesigns.net

Timothy S. Marshall
3/20/02

A. T. DESIGNS, INC.

GENERAL REQUIREMENTS

1.0 PROJECT LOCATION:

The Champlain Towers South Condominium project is located at, 8777 Collins Ave. Town of Surfside, Florida 33141

2.0 SCOPE OF WORK:

- A. The work to be performed by the CONTRACTOR includes furnishing all materials, labor, tools, equipment, whatsoever, transportation, supervision, temporary construction of any nature whatsoever necessary to modify, construct, remedy, complete, deliver, and place in operation the subject project as herein described and specified. All work shall be in accordance with the contract documents.

The specifications are intended to include everything required and necessary for the proper installation of the work, whether each necessary item is mentioned herein or not, unless otherwise specified, and the CONTRACTOR is expected to provide the same.

All work herein specified called for in the specification, or in detailed drawings shall be executed in accordance with all governing ordinances, laws and regulations and shall meet local conditions and any change and/or conditions will be made without additional expense to the OWNER, but such changes shall have the prior written approval of the OWNER.

3.0 INTENT OF DOCUMENTS:

- A. The documents are intended to outline procedure(s) and furnish guidelines to which the proposed work or part thereof which shall be constructed in accordance with the Contract Documents.

4.0 SUBMITTALS:

- A. The CONTRACTOR shall submit, with a letter of transmittal to the ENGINEER and two (2) sets of checked and approved product specifications. Allow a minimum of two weeks from the date of receipt for review by the ENGINEER. Review of the product specifications will be general and will not relieve the CONTRACTOR from any responsibility.

5.0 QUALITY CONTROL:

- A. Field Observations:

Forty-eight (48) hours notification to the ENGINEER by the CONTRACTOR shall be required for all specified field observations, unless otherwise noted.

6.0 MAINTENANCE OF TRAFFIC:

- A. The CONTRACTOR shall arrange his work to cause minimum disturbance of normal pedestrian and vehicular traffic and be responsible for providing suitable means of access to all public and private properties during all stages of construction. Other than for an emergency safety condition, the CONTRACTOR must contact the OWNER and ENGINEER for approval prior to completely blocking off any street or parking to vehicular traffic during construction.
- B. The CONTRACTOR shall make accommodations to provide access to the individual units, at the end of each work day, and submit their recommendations to the OWNER and ENGINEER for approval.

7.0 PLACING EQUIPMENT INTO SERVICE:

- A. Electrical equipment shall not be energized, or placed into service, nor shall mechanical equipment be operated by the contractor until approved by the OWNER and ENGINEER. Such approval shall be granted only after all interested parties have been duly notified in writing, have given approval for placing the equipment into service, and all interested parties are present or waived their right to be present. The CONTRACTOR shall notify the OWNER and ENGINEER a minimum of twenty four (24) hours or as far as in advance as possible of the dates that various items and equipment will be completed and ready for start-up.

8.0 STORAGE AND USE OF PREMISES:

- A. The CONTRACTOR shall confine his apparatus, materials storage and operations of personnel to the limits indicated by the OWNER or ENGINEER. All materials used on the project shall be stored in a single place designated by the OWNER or ENGINEER. The storage area shall be kept clean and the CONTRACTOR shall be liable for damages to surrounding areas.
- B. Flammable materials and/or any other fire hazardous materials shall be stored, handled and use in an approved manner in accordance with all local codes and ordinances.

9.0 ACCESS TO AREAS OF PROPOSED WORK:

- A. The work to be performed to the west face walkways shall be accessed through the stairwells at the north and south ends of the building. The use of the elevator shall only be granted upon receipt of a written request and shall be subject to the approval of the OWNER or ENGINEER.
- B. The work to be performed to the east face balconies shall be accessed from the exterior of the building through the use of swing stages and/or types of approved mechanical apparatus. Under no circumstance shall the CONTRACTOR be able to access the individual units through the west face doorway without being accompanied by the OWNER or ENGINEER.

10.0 PROTECTION OF THE UNIT INTERIORS:

- A. The CONTRACTOR shall construct temporary barriers for each individual unit having work performed to their balconies and prior to the removal of the sliding glass doors and submit a scaled drawing detailing the barrier construction and all materials for approval by the OWNER and ENGINEER.
- B. The construction of the temporary barrier wall and the removal of the sliding glass doors shall require displacement of the carpeting which shall be rolled back approximately four (4) feet from the sliding doors. The CONTRACTOR shall replace all rusted and/or damaged tack strips prior to relaying the displaced carpet.
- C. Upon completion of the proposed work to the individual unit balconies, the CONTRACTOR shall be responsible to repair, replace any item or component of the unit interior damaged during the repairs the balconies. All disputes and/or claims of damage shall be reviewed in accordance with the general conditions.
- D. Should adverse conditions such as sever storms or hurricanes be forecasted to effect the project area, the CONTRACTOR shall be responsible for reinstalling all apparatus such as hurricane shutters and sliding glass doors to insure the protection of the units interiors.

11.0 PROJECT RECORD DOCUMENTS:

- A. The CONTRACTOR shall keep one record copy of all Specifications, Drawings, Agenda, Modifications, Shop Drawings and Samples at the site, in good order and annotated to show all changes made during the construction process.

SECTION 0400

CONCRETE AND STUCCO RESTORATION

1.0 RELATED DOCUMENTS:

Drawings, related documents and general provisions of the contract, including general and supplementary conditions and specifications, apply to this work of this section.

2.0 SCOPE OF WORK:

- A. The CONTRACTOR shall provide all labor, material, testing, tools, equipment, and product to remove existing materials and remedy, complete, deliver and construct the work to be specified herein.
- B. Work shall include:
 - Applications and permits for performing the work.
 - Removal and hauling of all materials.
 - Testing of a sample area to determine chloride content of the concrete.
 - Preparation of the affected surfaces and substrates.
 - Placement of the approved materials on affected areas.
 - Removal of all equipment and debris upon completion of work.
- C. The CONTRACTOR shall submit three (3) samples of all materials as specified or approved equals and as otherwise requested by the ENGINEER, including but not limited to the following:
 - 1. Manufacturer's Literature: Descriptive data including recommendations for mixing, application and curing.
 - 2. Test Reports: Manufacturer's certified test reports showing compliance with the specification requirements.
- D. Provide material certificates signed by the manufacturer and contractor, certifying that each material item complies with, or exceeds the specified requirements set forth in the CONTRACT DOCUMENTS.
- E. The CONTRACTOR shall conduct tests to determine the chloride content gradient of the concrete to avoid increased corrosion potential. All test areas shall be subject to approval by the ENGINEER.

3.0 STANDARDS:

- A. Concrete work shall conform to all requirements of ACI 301-99, "Specifications for Structural Concrete Buildings", except where modified in this or other sections of

the specifications.

- B. The CONTRACTOR shall familiarize himself with the requirements of ACI 301 in all respects and all modifications as stated in these specifications.
- C. The CONTRACTOR shall familiarize himself with the requirements of the manufacturer of the products being used in this application, in all respects.

4.0 QUALITY ASSURANCE:

- A. The CONTRACTOR shall be qualified and experienced in the work of this scope and scale, having demonstrated experience for five (5) years and shall provide locations of work and references for review by the OWNER and ENGINEER.
- B. The CONTRACTOR shall be an approved CONTRACTOR of the manufacturer of the specified product, who has completed a program of instruction in the use of the specified repair materials and provide a notarized certification from the manufacturer attesting to their APPROVED CONTRACTOR status.
- C. At the discretion of the ENGINEER, bids shall be accepted from a contractor other than an APPROVED CONTRACTOR of the manufacturer of the specified product. Said CONTRACTOR shall provide the ENGINEER with five job references where they have successfully repaired any structural and/or non-structural cracks with the specific product.
- D. Prior to proceeding with the work described herein, the CONTRACTOR shall finish one complete area as a demonstration of the product, where designated by the ENGINEER, clearly indicating color, finished texture, materials and workmanship. The sample area, when accepted by the ENGINEER, shall serve as a minimum standard for the work throughout the entire project.
- D. The APPROVED CONTRACTOR of the manufacture of the specified products and the manufacturer shall provide the OWNER with a joint and several guarantee on the application and product covered in this specification for a period of not less than five (5) years from the date of substantial completion of the project.

5.0 SCHEDULING AND APPLICATION CONDITIONS:

- A. A bi-monthly progress and ultimate work schedule shall be furnished by the CONTRACTOR for approval and shall be based upon the contract completion date. The CONTRACTOR shall advise the OWNER of the areas in which work is to be performed in advance of the scheduled work to permit the notification of the individual unit owners to move furniture, vehicles, etc.
- B. The CONTRACTOR shall meet with the OWNER and ENGINEER for the purpose of inspecting and monitoring the work performed. The CONTRACTOR shall give the ENGINEER at least 48 hours notice prior to an inspection. Any discrepancies and/or deviations from the plans and/or specifications shall be reported

immediately, in writing, to the OWNER and ENGINEER.

- C. Application of all materials shall be performed in dry weather and temperatures of 50 degrees or higher. Exterior work shall be halted to permit materials to set up or harden before condensation by night temperature drop occurs. Do not proceed with application of any material until surfaces are moisture free.

6.0 DELIVERY, STORAGE AND HANDLING:

- A. The delivery of the specified products shall be in their original, unopened containers with the manufacturer's name, label, product identification and batch numbers.
- B. All products shall be stored and conditioned as recommended by the manufacturer.

7.0 SURFACE CLEANING & PREPARATION:

A. Demolition of Existing Chattahoochee, River Rock, or Poly Pebble Surfaces: (If Applicable)

- 1. The existing epoxy encapsulated pedestrian decks, and walkways shall be removed to the concrete surface by means of mechanical abrading, blast tracking scarifying., grinding, sand blasting and/or manual spudding.

B. Demolition of Existing Tile, Paver, Slate Deck Surfaces: (If Applicable)

- 1. Existing decks tiles, pavers, slate shall be spudded off according to industry standards.
- 2. All materials shall be removed, cleaned by means of mechanically abrading, blast tracking, or scarifying, according to industry standards, to provide a sound substrate for the approved material installation.

C. Removal of Existing Carpeting and Carpet Glue, Tack Strips, Etc. (If Applicable)

- 1. Existing carpeting on areas to be treated shall be totally removed and discarded.
- 3. All materials shall be removed, cleaned by means of mechanically abridging, blast tracking, or scarifying, according to industry standards, to provide a sound substrate for the approved material installation.

D. Blast Tracking and Abrading of Floor Substrate:

- 1. All floor surface substrates shall be blast tracked and/or sand blasted in order to remove surface film contaminates, and existing coatings, to profile the surface to receive the new surface material and insure an adequate bonding profile.

E. Mechanical Planing/Scarifying:

- 1. The floor surface shall be scarified/mechanically planed utilizing approved

machinery, according to industry standards, to remove all surface contaminants which were not removed after blast tracking and/or sand blasting to score the substrate surface in order to provide an adequate bonding profile for the approved surface material application.

F. Hydro Blasting:

1. The exposed concrete substrate shall be thoroughly hydro blasted. The hydro blasting equipment shall be of a size and capacity to deliver a minimum of 5000 pounds per square inch (psi), with a minimum water volume usage of 10 gallons per minute (gpm).
2. A chlorine/detergent solution shall be applied to all surfaces prior to hydro blasting to remove fungus, dirt, atmospheric pollutants, salt residue, chalking and existing deteriorated materials. The solution may be applied with a garden type spray equipment, or by utilizing siphon tip assembly on hydro blasting equipment, prior to the final hydro blasting.
3. Areas exhibiting efflorescence deposits shall be treated with a 10% to 25% solution of muriatic acid to water mixture, scrubbed with stiff bristle brushes and thoroughly rinsed with pure water to neutralize acidity.
4. Cleaning of all the surfaces to be coated or otherwise be treated shall be phased according to project size and scope of work in order to avoid surface re-contamination prior to further treatment.
5. Planted areas, foliage, etc. shall be lightly rinsed with clean water to remove any chalk and/or residue and dilute any chemical residue deposits as a result of the surface preparation procedures.

H. Preparation and Treatment to Rust and Iron Deposits on the Masonry Surface

1. During the hydro blasting process, remove all rust and iron deposits from masonry surfaces with a solution of 10% to 25% oxalic acid and water mixture, or equal, and scrub with a stiff bristle brush and rinse thoroughly with pure water.

I. Removal and Replacement of Caulk

1. During the preparation of the designated surfaces all caulking material which runs around the perimeter or at the intersection of various facades shall be removed by cutting out the caulking in the affected area.
2. Upon completion of the surrounding surface preparation all joints shall be filled with a two part polyurethane material to prevent moisture penetration and allow for minimal movement. The material to be used shall be approved by the ENGINEER.

J. Inspection of Cleaned Surfaces

bonding/grouting adhesive material as manufactured by Sonneborn or approved equal.

2. Embedded fasteners and accessories, if required to further strengthen the stability of the handrails, are to be made of ASTM A316 stainless steel, especially where used to secure aluminum components to the concrete. All penetrations required to fasten the component to the concrete are to be sealed either by the application of a silicon sealant to the fastener or by bedding the component in an approved epoxy material to assure proper adhesion and against moisture penetration. The placement of such fasteners shall in no way interfere with the drainage of the surrounding concrete surface.
3. If the affected handrails bases are deteriorated to a point where adequate structural reinforcement will not be provided by placement of external accessories, inserts of similar material shall be used to reinforce the railing posts. The inserts shall be embedded into the concrete slab and inserted into the main railing posts and bolted for stability. The cut sheets of the proposed inserts shall be submitted and reviewed by the OWNER and ENGINEER prior to final approval for placement.
4. The contractor shall take precautions to prevent dissimilar metals from coming into contact with each other by providing insulating materials and/or sleeves between the two dissimilar metals of approved thickness and composition.
5. All railing post penetrations, in used and/or previously filled, shall be filled to slab grade and crowned with approved materials and methods to improve stability and prevent moisture from collection around the railing posts.

10.0 CRACK REPAIR:

1. Treatment to Deck Cracks

- a. All surfaces to be repaired shall be clean, dry, and free from dirt, grease, oil, loose or peeling paint, chalk, salt or other surface contaminants which would act as a bond breaker to the repair materials.
- b. Cracks of 1/16th inch in width or larger shall be cut out using suitable tools, enlarging the crack to permit sufficient application of the approved materials.
- c. All areas surrounding the crack, where excessive dust is evident, shall be sealed with methyl ethyl ketone or denatured alcohol, according to approved manufacturer's specifications and industry standards, to provide a sound bonding surface for the new sealant.

4. Application of Approved Repair Materials:

- a. Shrinkage cracks of 1/32th inch or less in width, after proper preparation, shall be filled with a liquid application epoxy resin material sealer or other approved materials and one (1) layer of fiberglass mesh, in accordance with manufacturer's recommendations, and allowed to set.

- b. Movement cracks of 1/16th to 1/4th inch in width shall be cut or ground out and cleaned and primed in accordance with the specifications. Injection ports shall be placed at equal spacing of six (6) inch intervals or less. The ports shall be set in approved epoxy gel applied to the entire length of the crack and built up around the ports and given adequate time to set, prior to starting the injection process. The injection of the gel shall be performed using a machine-operated hydraulic pumping system and ensuring that the gel has flowed to each port. This method is done by clamping off ports where the injected gel is observed flowing out and repeating injecting the previously injected ports to insure the gel has completed filled the void.

11.0 PREPARATION AND TREATMENT OF EXPANSION JOINTS:

1. Surfaces to be repaired must be clean, dry and free from dirt, grease, oil, loose and/or peeling paint, caulk, salt or other surface contaminants which may act as a bond breaker to the new materials. All existing deteriorated sealant materials and/or joints designated for repair shall be cut out completely. Dress the joint's side walls with grinders to remove all foreign materials and install new backing rods as necessary, for standard joints or proper strip backing for wide expansion joints, to provide proper depth-to-wide ratio and prevent three-point adhesion failure.
2. **Installation of Primer:**
 - a. Joint wall substrate shall be inspected for weak and/or deteriorated areas and repaired where necessary.
 - b. Clean the joints side walls with methyl ethyl ketone or denatured alcohol. Chalked and/or masonry surfaces (interior joint side walls) shall be primed with sealant the manufacturer has recommended primer to assure permanent adhesion.
3. **Sealant Installation:**
 - a. Install all of the joint sealant material with caulking and/or glazing tools, filling the joint completely by following the manufacturer's recommended method of material placement.
 - b. At perimeter caulking applications (90 degrees) or as necessary, where a triangular fillet is required such as a floor-to-wall joint, thresholds, door tracks, etc. care must be taken to insure that an adequate bonding area to each substrate can be maintained. Under no circumstances should the bonding area of the sealant beads be less than 1/4 inch or manufacturer's recommended minimum area.
4. **Installation of New Expansion Joints:**
 - a. New joints shall be cut using power saws with carbonated blades, cut new joints to the proper depth and width as follows:

i. The new joint should be a minimum of four times the anticipated movement or sized in accordance with the manufacturer's recommendations.

ii. Minimum sealant joints:

1/4" x 1/4" Depth of the joint should not exceed the width from 1/4" to 3/4".

1/2" x 1/2" Depth of the joint should not be more than 1/2" to 5/8" (plus the required depth of the backing rod, if required).

- a. A closed cell polyurethane or neoprene backing rod shall be used to control the depth of the joint sealant material application and to prohibit three-point adhesion failure. Extreme caution must be taken when placing the backing rod so as not to puncture the rod.
- b. Where the joint depth does not permit use of regular joint backing, a release paper (bond breaker) or releasing tape shall be utilized.
- c. Maximum Joint Size: Approximately two (2) inches in wide by 5/8 inches in depth plus the diameter of the backing rod, if required.
- d. Install Sealant to joint as detailed and tool with flat hand tools or by product manufacturer's approved methods.

12.0 STUCCO REPAIR:

1. Description of Work:

- a. The scope of work shall be as outlined in Part 3 hereof.

2. Submittals:

- a. The Contractor shall submit to the Engineer product specification sheets for review and approval. Prior to the beginning of work the Contractor shall submit to the Engineer samples of the proposed product to be used for each particular item of repair. Additionally, the Contractor shall provide areas for a sample of the work to be performed.

3. Delivery and Storage:

- a. All materials shall be delivered to the site in original, new, unopened packages, containers, or wrappings bearing the manufacturer's name and label which shall include the product name, material identification number, stock number, color name and number, manufacturer's name, instructions for usage and coverage, and any other pertinent information.

4. Job Conditions:

- a. The job site shall be maintained in a neat and orderly fashion and shall be cleaned at the end of each workday. Protection of the property from damage while performing the proposed work shall be the sole responsibility of the Contractor. All work shall be completed in a timely manner in accordance with the repair specifications.

5. Surface Preparations:

- a. All paint shall be removed 6" from the edge of each side of the repair. (1) Layer of 4" fiberglass mesh shall be installed where the new stucco meets the old stucco to prevent cracking. An approved stucco-bonding agent shall be applied onto the prepared surface.
- b. All surfaces shall be properly prepared and cleaned prior to the application of any material. All exterior surfaces to be painted or coated shall be pressure cleaned at a minimum pressure of 2500 PSI to remove all dirt, mildew, caulks paint, and any foreign materials. Cleaning solutions may be used to remove any foreign material but shall be rinsed off prior to application of any material. Any loose and/or scaling paint, or deterioration uncovered during the high pressure cleaning shall be removed, or repaired to provide a sound substrate for the application of the materials.

13.0 EPOXY INJECTION:

1. The area surrounding the crack to be injected shall be clean of efflorescent, deteriorated concrete and other contaminants that may be detrimental to the adhesion of the epoxy gel. If unsound or deteriorated concrete is located next to the crack, all unsound or deteriorated concrete shall be removed prior to the injection.
 2. Install injection ports at appropriate intervals to accomplish full penetration of the injection adhesive. The final spacing of the ports shall be determined by the size of the crack, the depth of the substrate and the orientation of the injection. At no time shall the spacing exceed eight (8) inches. The injection ports shall be installed using one or more of the following methods. The CONTRACTOR performing the WORK shall be responsible for the method or form WORK as described in this section. However, the drilled in method shall be used when the crack width is less than .002 inches.
1. Surface Mounted Injection Ports:
 - a. Center the injection ports over the crack and secure in place using epoxy gel. Where possible, install the injection ports over the widest areas along the length of the cracks.
 - b. Completely seal the exposed crack located between the injection ports and other areas, as required to prevent leaking of the adhesive, using epoxy gel. The epoxy gel shall be neatly applied at an approximate thickness of 1/16" to 1/8".

- c. If the crack extends through the member, and if accessible, install telltale injection ports on the opposite side and seal all exposed areas of the crack. Generally, the spacing of the telltale injection ports should be twelve (12) to Twenty-four (24) inches.

2. Drilled In Injection Ports:

- a. A vacuum attached swivel drill chuck and hollow drill bits shall be used for all drilled in injection ports to reduce the possibility of concrete dust, produced during the drilling, from sealing the crack and blocking the resin flow.
- b. The holes shall be drilled with a minimum 5/8" inch depth. Exercise care so as not to drill beyond a crack which may be running at an angle to the surface.
- c. The injection ports shall be inserted into the drilled holes about 1/2 inch, allowing for a small reservoir below the injection port. Secure the injection ports into position using epoxy gel.
- d. When cracks to be injected have sealants, debris or other contaminants inside and when determined by the CONTRACTOR OR ENGINEER, these cracks shall be flushed out using water or air under high pressure.

14.0 **GENERAL NOTES:**

1. All specified and otherwise approved materials must be prepared for and mixed as required, prepared and placed in strict accordance with the manufacturer's recommendations.
2. No material, even if specified, shall be placed until the contractor has submitted product information sheets on each material to be used and has received approval from the ENGINEER.
3. Shoring shall be used under all areas which are being worked upon or show signs of excessive deflection and/or hazardous conditions. Shoring calculations must be submitted to the ENGINEER prior to the placement and/or use of any shores in accordance with the CONTRACT DOCUMENTS.
4. No material shall be placed until the ENGINEER has observed and approved the preparation of each location where said specified material is to be used.
5. Exhaustive measures shall be taken to protect the site doors from any type of damage as result of the completion work. If interior work is required, the contractor shall submit drawings, detailing all precaution measures to be taken.

Section 0500

CAST-IN PLACE CONCRETE

1.0 RELATED DOCUMENTS:

Drawings, related documents and general provisions of the contract, including general and supplementary conditions and specifications, apply to this work of this section.

2.0 SCOPE OF WORK:

A. The CONTRACTOR shall provide all labor, material, testing, tools, equipment, and product to remove existing materials and remedy, complete, deliver and construct the work to be specified herein.

B. The work shall include:

Applications and permits for performing the work.
Removal and hauling of existing materials
Testing of a sample area to determine chloride content of the concrete.
Preparation of the affected surfaces and substrates
Placement of the approved materials on affected areas
Removal of all equipment and debris upon completion of work.

C. The CONTRACTOR shall submit two (2) samples of all materials as specified herein and/or as otherwise requested by the ENGINEER, including:

1. Manufacturer's Literature: Descriptive data including recommendations for mixing, application and curing.

2. Test Reports: Manufacturer's certified test reports showing compliance with the specification requirements.

D. Provide material certificates signed by the manufacturer and contractor, certifying that each product complies with, or exceeds the specified requirements set forth in the contract documents.

E. The CONTRACTOR shall conduct tests to determine the chloride content gradient of the concrete to avoid increased corrosion potential. All test areas shall be subject to approval by the ENGINEER.

3.0 STANDARDS:

A. Concrete work shall conform to all requirements of ACI 301-99, "Specifications for Structural Concrete Buildings", except where modified in this or other sections of the CONTRACT DOCUMENTS.

- B. The CONTRACTOR shall familiarize himself with the requirements of ACI 301 in all respects and all modifications as stated in these specifications.
- C. The CONTRACTOR shall familiarize himself with the requirements of the manufacturer of the products being used in this application, in all respects.
- D. The Standard Building Code, 1991 Edition

4.0 SUPPLEMENTARY REQUIREMENTS TO ACI 301:

- A. Comply with Chapter 2 of ACI 301 and the Supplemental Requirements as stated herein:
- B. Cement - Type I or III of ASTM C150-85a.

C. ADMIXTURES:

1. Water reducing Admixtures: Eucon WR-75 by the Euclid Chemical Company, Pozzolith 200N by Master Builders, or Plastocrete 160 by Sika Chemical Corp. The admixture shall conform to ASTM C494, Type A and not containing more chloride ions that are present in municipal drinking water.
2. Water Reducing, Retarding Admixture: Eucon Retarder-75 by the Euclid Chemical Company, Pozzolith 100XR by Master Builders or Plastiment by Sika Chemical Corp. The admixture shall conform to ASTM C494, Type D, and not containing more chloride ions than are present in municipal drinking water.
3. High Range Reducing Admixture (Superplasticizer): Eucon 37 by the Euclid Chemical Company, or Sikament by Sika Chemical Corp. The admixture shall conform to ASTM C494-86, Type F or G, and not containing more chloride ions than are present in municipal drinking water.
4. Non-Chloride Accelerator: Accelguard 80 by the Euclid Chemical Company, or Darex Set Accelerator by W.R. Grace. The admixture shall conform to ASTM C494-86, Type C or E, and not containing more chloride ions than are present in municipal drinking water.
5. Air Entraining Admixtures: Conforming to ASTM C260.
6. Calcium Chloride: Calcium chloride or admixtures containing more than 0.1% chloride ions are not present.
7. Certification: Written conformance to the previously mentioned requirements and the chloride ion content will be required from all admixture manufactures prior to the mix design review by the ENGINEER.

4.0 PROPORTIONING:

- A. Comply with Chapter 3 or ACI 301 and the Supplemental Requirements as stated herein:

B. Strength: Concrete slabs, designated as "Concrete Pavement" and subject to pedestrian traffic, shall have a 28-day compressive strength of not less than 4000 PSI and a flexure strength (modulus of rupture) of not less than 650 PSI when tested in accordance with the "Method of Test for Flexural Strength of Concrete (using simple beam with third point loading), ASTM C78-99.

C. Durability:

1. General:

- a. Concrete required to be air entraining shall contain the " Air Entraining Admixture", and air content shall comply with table 3.4.1 of ACI 301.
- b. All pumped concrete shall contain "High Range Water Reducing admixture".
- c. The "Water Reducing", Type A, or "Water Reducing and Retarding, Type D admixtures complying with ASTM C494-86 may be used at the option of the contractor.
- d. All concrete containing the "High Ranging Water Reducing Admixture" (Superplasticizer) shall have a maximum slump of 8 inches or less otherwise directed by the ENGINEER. The concrete shall be proportioned for a verified slump of 2 to 3 inches, when the High Range Water Reducing Admixture is added to increase the slump to the approved level.
- e. All other concrete shall be proportioned to have a maximum slump of 4 inches.

2. All normal weight concrete shall be air-entrained. The amount of air-entraining shall be in accordance with Table 3.4.1 of ACI 301.

3. All other concretes shall abide by and be in conformance with paragraph 2.03 D(1) of ACI 301.

5.0 **FORM WORK:**

- A. All form work shall conform with Chapter 4 of ACI 301 and the Supplemental Requirements as stated herein:
- B. Earth cuts shall not be used as forms for vertical surfaces.
- C. Form ties that leave through holes in the concrete are not permitted.
- D. No forms shall be removed prior to the concrete achieving 75% of its design strength.

- E. Flat slab forms and stair slab forms shall not be removed for five days. Upon removal of the forms, shoring shall be placed and remaining in place until the concrete is a minimum of 14 days old.

6.0 REINFORCEMENT:

- A. All reinforcement shall comply with Chapter 5 of ACI 301 and the Supplemental Requirements as stated herein:

B. REINFORCING STEEL:

1. Bars #3 through #11 shall be deformed in accordance with ASTM A615-85, Grade 60, and in accordance with the additional requirements of Paragraph 5.2.2.1 of ACI 301.
 2. Bars #2 in size shall be plain round ASTM A615-85, Grade 40.
 3. Welded wire fabric shall be plain wire.
 4. Unless indicated otherwise, the minimum concrete protective cover specified in Paragraph 5.5.1 of ACI 301 is the minimum specified cover.
 5. Slab and beam bottoms shall have reinforcement placed on plastic tipped or zinc coated legs or chairs.
 6. Any new placement of reinforcement shall be installed with a minimum of 30 diameters of overlap length.
- C. Rebar Couplers: Shall be threaded or swage connected to the reinforcing bars to be spliced. Any reinforcement to be welded shall be approved by the ENGINEER. The coupler shall be capable of developing 125% of the yield strength of the bar(s) in tension. In order to insure the proper orientation of the offset bars, the coupler connection of that bar must be swaged.

7.0 JOINT AND EMBEDDED ITEMS:

- A. All items shall comply with Chapter 6 of the ACI 301 and the Supplemental Conditions as stated herein:

B. EXPANSION JOINTS:

1. Premolded joint fillers shall be preformed bituminous type, conforming to ASTM D1751-83, for joints without sealant.

2. Premolded expansion joint fillers for joints with sealant and where indicated shall be non-extruding and resilient type in conformance with ASTM D1752-99 and compatible with urethane joint sealant compounds.

8.0 **PRODUCTION OF CONCRETE:**

A. All concrete shall comply with Chapter 7 of ACI 301 and the Supplementary Requirements as stated herein:

B. READY-MIX CONCRETE:

1. The contractor shall provide copies of each delivery ticket to the ENGINEER. The mix designation shall be included on the delivery ticket.
2. In no case shall concrete be cast-in-place which is over 90 minutes old from the time the mix was batched.

C. WEATHER CONDITIONS:

1. Where the relative humidity is less than the corresponding concrete temperatures placed, or intended to be placed, as indicated in the following Table, the contractor shall follow the recommendations of ACI 305R-77, "Hot Weather Concreting";

| <u>Concrete Temperature</u> | <u>Minimum Relative Humidity</u> |
|---------------------------------|------------------------------------------|
| 100 deg F | 80 |
| 95 deg F | 70 |
| 90 deg F | 60 |
| 85 deg F | 50 |
| 80 deg F | 40 |
| 75 deg F | 30 |

The above Table is based upon a wind speed of 10 mph. For ambient wind speeds in excess of 10 mph, the CONTRACTOR shall follow the recommendations of Fig. 2.1.5 of ACI 305R if the relationship of air temperature, wind speed, relative humidity and concrete temperature indicates a rate of evaporation in excess of 0.2 pounds per square foot per hour.

2. The requirements of paragraph 7.6.2 of ACI 301 (Cooling of Concrete Ingredients) are not waived.

9.0 **PLACING:**

A. Placement of all concrete shall comply with Chapter 8 of ACI 301 and the Supplemental Requirements as stated herein:

- B. Protection: When the temperature of the concrete exceeds the minimum relative humidity relationship specified in The Paragraph "Production of Concrete" the requirements of Paragraph "Production of Concrete Shall Control.

10.0 REPAIR OF SURFACE DEFECTS:

- A. The repair of all surface defects shall comply with the Supplementary Requirements as stated herein:
- B. With prior approval of the ENGINEER, as to the methods and procedures, all repairs of defective areas shall conform to ACI 301, Chapter 9.
- C. All defects designated as "structural" by the ENGINEER shall be repaired with prior approval of the ENGINEER, as to the methods and procedures, using epoxy adhesive and/or epoxy mortar materials submitted for approval in conformance with the procedures as outlined in CONTRACT DOCUMENTS.

11.0 CONCRETE SLABS:

- A. All cast in place concrete slabs shall comply with Chapter 10 of the ACI 301 and the Supplemental Requirements as stated herein:
- B. All finishes shall be in accordance with the Paragraph 11.8 of ACI 301 except for exterior slabs receiving tile, paver or similar coverings shall be troweled finished.

12.0 CURING AND PROTECTION:

- A. The curing and protection of the concrete shall comply with Chapter 12 of ACI and the Supplemental Requirements as stated herein:
 - B. The preservation of moisture shall be in accordance with Paragraph 12.2 of ACI 301.
 - 1. CURING AND SEALING COMPOUND: All compound shall conform to ASTM C-309_81, Type 1 or Type 1D, 30 % solids minimum content and have test data from an independent laboratory indicating a maximum moisture loss of 0.030 grams per sq. cm when applied at a coverage rate of 300 sq. ft. per gallon. The manufacturers certification is required.
1. CURING AND HARDENING COMPOUND: All curing and hardening compounds shall be sodium silicate type.
- 3. Apply all compounds in accordance with the manufacturer's recommendations and directions.
 - 4. All slabs, except for exterior walks and pavements, which are of exposed concrete in the finished structure shall receive a curing and sealing compound.

5. All slabs which are to receive cementitious or other toppings are to receive a curing and hardening compound.
6. The CONTRACTOR shall verify the compatibility of the compounds with the proposed applied coverings or toppings.
7. The CONTRACTOR shall submit all manufacturers product data for review by the ENGINEER.

C. APPLICATION OF CURING, SEALING AND HARDENING COMPOUNDS: Apply all compounds to the concrete floors and slabs in accordance with the manufacturers recommendation or as follows:

1. After the freshly poured concrete has been finished and hardened so not to allow marring by application, uniformly apply the undiluted compound by spray, brush or squeegee without allowing the compound to collect in low spots.
2. Keep all traffic off the compound applied surface until the surface is completely dry.

13.0 **TESTING:**

- A. All testing shall comply with Chapter 16 of ACI 301 and the Supplementary Requirements as stated herein:
- B. All testing of the concrete to review the materials, mixture, strength, slump, temperature, air content or any other information as required by the ENGINEER shall be conducted and paid for by the CONTRACTOR.
- C. Failure to meet the specifications, for whatever reason, and/or the replacement of the CONTRACTOR requiring additional testing, shall be paid by the CONTRACTOR.
- D. TESTING INTERVALS: For all concrete cast-in-place shall be tested at the following intervals:
 1. Strength test for concrete molds, cure and test five specimens, one at 3 days, one at 7 days and three at 28 days.
 2. Make one strength test for each 10 cubic yards or fraction thereof place in any one day.

- Slump tests are to be taken for every 10 cubic yards or fraction thereof placed in any one day.

SECTION 0600

MOISTURE PROTECTIVE COATINGS

1.0 RELATED DOCUMENTS:

Drawings, related documents and general provisions of the contract, including general and supplementary conditions and specifications, apply to the work of this section.

2.0 SCOPE OF WORK:

A. The CONTRACTOR shall provide all labor, material, tools, equipment, and product to remove existing materials and remedy, complete, deliver, construct the work to be specified herein.

B. The work shall include:

Applications and permits for performing the work.
Removal and hauling of existing materials
Preparation of the affected surfaces
Placement of the approved materials on affected areas
Removal of all equipment and debris upon completion of work.

C. The CONTRACTOR shall submit two (2) samples of all materials as specified and as otherwise requested by the ENGINEER, including the following:

1. Color Samples: Three (3), minimum 8 in. x 8 in. swatches of the manufacturer's full color range to the OWNER and ENGINEER for their selection.
2. Manufacturer's Literature: Descriptive data including recommendations for mixing, application and curing procedures.
3. Test Reports: Manufacturer's certified test reports showing compliance to specification requirements.

D. Provide material certificates signed by the manufacturer and contractor, certifying that each material item complies with, or exceeds the specified requirements set forth in the contract documents.

3.0 QUALITY ASSURANCE:

A. The CONTRACTOR shall be experienced in work of this scope and scale described herein, having demonstrated experience for a minimum of five (5) years and shall provide locations of work and references for review by the OWNER and ENGINEER.

- B. Prior to proceeding with the work as described herein, the CONTRACTOR shall finish one complete area as a demonstration of the specified product, where designated by the OWNER and ENGINEER, clearly indicating selected color, finished texture, materials and workmanship. The sample area, when accepted by the OWNER and ENGINEER, shall serve as a minimum standard for work throughout the entire project.
- C. The CONTRACTOR shall provide primers and other undercoat material produced by the same manufacturer as the finished coats. Use only thinners, where necessary, which are approved by the product manufacture, and use only in the recommended limits.
- D. The right is reserved by the OWNER to invoke the following material testing procedures, at any time, during the period of field application, at the expense of the CONTRACTOR:
 - 1. Engage the services of an independent testing laboratory to sample product being used. All sample materials delivered to the project site can be taken, identified and sealed, and certified in the presence of the CONTRACTOR. The testing laboratory shall perform tests to determine if the samples taken meet or exceed the outlined specified produce guidelines as stated herein.
 - 2. If the test results show that the material being used does not comply with the specified requirements, the CONTRACTOR may be directed to stop all work and remove the non-complying paint, pay for testing, repaint surfaces coated with the rejected paint, remove paint from the previously painted surfaces if, upon repainting with specified paint, the two coatings are non-compatible.

4.0 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. The approved materials shall be delivered in manufacturer's originally sealed containers with labels intact and legible, clearly identifying the manufacture, brand name, contents by volume, stock number and date of manufacture, application instructions, color name and number.
- B. All materials in original sealed containers shall be stored in an area designated by the OWNER and ENGINEER and at a temperature not less than fifty (50) and greater than (90) degrees Fahrenheit.

5.0 SCHEDULING AND APPLICATION CONDITIONS:

- A. Application of all materials shall be done in dry weather and temperatures between 50 to 90 degrees or unless otherwise permitted by the product manufacturer's printed instructions. Exterior work shall be halted to permit materials to set up or harden before condensation by night temperature drop occurs.

- B. The CONTRACTOR shall not proceed with application of materials in rain, fog or when the relative humidity exceeds 85%, and/or to damp or wet surfaces, unless otherwise permitted by the paint manufacturer's printed instructions.
- C. The CONTRACTOR shall provide adequate continuous ventilation in areas lacking natural ventilation.
- D. A progress and/or work schedule shall be furnished by the CONTRACTOR for approval and shall be based upon the contract completion date. The CONTRACTOR shall advise the OWNER of the areas in which work is to be performed in advance of the scheduled work to permit the notification of the individual unit owners to move furniture, vehicles, etc.
- E. The CONTRACTOR shall meet with the ENGINEER for the purpose of inspecting and monitoring the work performed. Any observed discrepancies shall be reported immediately, in writing, to the ENGINEER.

6.0 SURFACE CLEANING:

A. Blast Tracking and Sand Blasting of Floor Substrate:

- 1. The floor surface substrates shall be blast tracked and/or sand blasted in order to remove surface film contaminants, coatings, and to profile the prepared surface to receive the new surface material.

B. Mechanical Planing/Scarifying:

- 1. The floor surface shall be scarified/mechanically planed utilizing approved machinery, according to industry standards if the prepared surface does not display adequate bonding capabilities, to remove all surface contaminants and to score the substrate surface in order to provide bonding for the approved surface material installation.

C. Hydro Blasting:

- 1. The exposed substrate shall be thoroughly hydro blasted to remove any remaining foreign substances as determined by the ENGINEER. The hydro blasting equipment shall be of a size and capacity to deliver a minimum of 3000 pounds per square inch (psi), with a minimum water volume usage of 6 gallons per minute (gpm).
- 2. A chlorine/detergent solution shall be applied to all surfaces prior to hydro blasting to remove fungus, dirt, atmospheric pollutants, salt residue, chalking and existing deteriorated materials. The solution may be applied with a garden type spray equipment, or by utilizing siphon tip assembly on hydro blasting equipment, prior to the final hydro blasting.

3. Areas exhibiting efflorescence deposits shall be treated with a 10% to 25% solution of muriatic acid to water mixture, scrubbed with stiff bristle brushes and thoroughly rinsed with pure water to neutralize acidity.
4. Cleaning of all the surfaces to be coated or otherwise be treated shall be phased according to project size and scope of work in order to avoid surface re-contamination prior to further treatment.
5. Planted areas, foliage, etc. shall be lightly rinsed with clean water to remove any chalk and/or residue and dilute any chemical residue deposits as a result of the surface preparation procedures.

D. Preparation and Treatment to Rust and Iron Deposits on the Masonry Surfaces:

1. During the hydro blasting process, remove all rust and iron deposits from masonry surfaces with a solution of 10% to 25% oxalic acid and water mixture, or equal, and scrub with a stiff bristle brush and rinse thoroughly with pure water.

E. Inspection of Cleaned Surfaces:

1. All substrate surfaces shall be carefully inspected and further abrading/scoring, as required, in order to provide a surface free of debris and with adequate texture bonding for the subsequent product application.

F. Debris Storage and Removal:

1. All demolished materials, dirt, and/or debris removed from all the substrate surfaces shall be cleaned on a daily basis and deposited in dumpster(s) supplied by the CONTRACTOR and shall be hauled and/or deposited in sanitary landfills according to state and local regulations.

7.0 SURFACE PREPARATION:

- A. General: Perform surface preparation in accordance with the manufacturer's instruction and as herein specified, for each particular substrate condition.
- B. The CONTRACTOR shall provide barrier coats over incompatible primers or remove and prime again as required. The ENGINEER shall be notified, in writing, of any anticipated problems in using the specified coatings systems with the substrates and/or existing materials.
- C. Remove all hardware, hardware accessories, machined surfaces, plates, lighting fixtures and other items in place and not to be finish coated, or provide surface-applied protection prior to the surface preparation and coating operations. Remove, if any necessary, for complete coating of items and adjacent surfaces and following completion of work, reinstall removed items.

- D. All surfaces shall have a bonding agent and/or other materials applied prior to the application of the finish materials to insure adequate bonding between the existing surface substrate and the coating to be applied.

D. Cement Materials:

- 1. Prepare surfaces of concrete, concrete block, cement plaster and cement-asbestos board to be coated by removing efflorescence, chalk, dust, dirt, grease, oil, and by roughening, as required to remove glaze and insure adequate bonding.
- 2. The CONTRACTOR shall determine the alkalinity and moisture content of the surfaces to be coated by performing appropriate tests at the CONTRACTOR'S expense. If surfaces are found to be sufficiently alkaline to cause blistering and burning of the finish paint, correct the condition before application. Do not paint over surfaces where the moisture content exceeds that permitted in the manufacturer's printed specifications.

D. Ferrous Metals:

- 1. Clean ferrous materials, which are not galvanized or shop coated of oil, grease, dirt, loose mill and any other foreign substances by solvent or mechanical cleaning.
- 2. The CONTRACTOR shall touch-up shop applied coats where damaged or bare as required with the same type of primer and clean.

8.0 MATERIAL PREPARATION:

- A. The CONTRACTOR shall mix and prepare all materials in accordance with the manufacturer's directions. The containers used to mix and apply the materials shall be kept free and clean of foreign substances and residue.
- B. The CONTRACTOR shall stir material before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain materials prior to application.

9.0 APPLICATION OF MATERIAL:

- A. General: The CONTRACTOR shall apply all materials and use applicators, and application techniques best suited for the substrate and type of material being applied in accordance with the manufacturer's recommendations and in accordance with the desired finishes.
- B. The CONTRACTOR shall provide all coats and finished coats in accordance with the materials used. Apply additional coats when undercoats, stains and/or other conditions show through the final coat of the material, until the finish is of uniform finish, color, texture, and appearance.

- C. The application of the approved materials shall be applied in layers to achieve a built up composite material finish. More specifically the material shall be applied in the following manner; (2) sub-coats, (1) Troweled textured coat, and (2) Acrylic color coats. The textured finish shall simulate a agreed to size tile pattern. The sub-coats shall be applied in adequate amounts as to eliminate, as much as possible, the existing depressions and/or drainage problems of the surface to receive the material.

10.0 MINIMUM COATING THICKNESS:

- A. The CONTRACTOR shall apply all materials at not less than the manufacturer's recommended minimum spreading rate, to establish a total dry material thickness as indicated or, if not indicated, as a minimum rate as recommended by the manufacturer.

11.0 CLEAN-UP AND PROTECTION:

- A. The CONTRACTOR shall, during the progress of work, remove from the site discarded all materials, rubbish, cans, and rags at the end of each day.
- B. Upon completion of the work, The contractor shall clean window glass and other paint spattered surfaces by proper methods of washing and scraping, using care not to scratch or otherwise damage finished and/or surrounding surfaces.
- C. The CONTRACTOR shall protect all work of other trades, whether to be part of the work or not, against damage by material application and finishing work and shall be responsible for repairing and/or replacing any damaged items.
- D. The CONTRACTOR shall provide "wet paint or work in progress" signs as required to protect newly worked on finishes and remove any protective warping upon completion of work.
- E. The CONTRACTOR shall construct a barrier to protect the interior of each unit from any damage related to the work and/or exposure to the elements. The method and construction of the barriers shall be approved by the OWNER and ENGINEER.

SECTION 0700

EMBEDDED GALVANIC ANODES

PART 1: GENERAL

1.01 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 Summary

- A. This Section includes furnishing all labor, tools, materials, equipment, and services necessary to properly install embedded galvanic anodes.
- B. Embedded galvanic anodes are designed to provide localized corrosion protection. When placed at the appropriate spacing along the perimeter of concrete patches or along the interface between new/existing concrete, the anodes mitigate the formation of new corrosion sites in the existing concrete.

1.03 References

- A. ACI/ICRI 1999 Concrete Repair Manual or latest edition
- B. CAN/CSA A23.1 Standard for Repair Mortars, Concrete and Bonding Agents
- C. CAN/CSA G30.18-M92 (R1998) Billet-Steel Bars for Concrete Reinforcement
- D. ASTM B418-95a Standard
- E. G30.3-M1983 (R1998) Cold-Drawn Steel Wire for Concrete Reinforcement

PART 2: PRODUCTS

2.01 Materials

- A. Embedded galvanic anodes shall be puck-shaped approximately 2-1/2 inches in diameter by 1 inch high (63 mm x 25 mm), pre-manufactured, and consist of zinc in compliance with ASTM B418-95a Type I cast around a pair of steel tie wires in compliance with bright annealed G30.3-M1983 (R1998) and encased in a highly alkaline cementitious shell with a pH of 14 or greater. Embedded galvanic anodes shall be Galvashield™ XP available from Vector Corrosion Technologies (204) 489-6300, or approved equal.
- B. Repair mortars, concrete and bonding agents shall be Portland cement-based materials with suitable electrical conductivity. Non-conductive repair materials such as epoxy, urethane, or magnesium phosphate shall not be permitted.
- C. Deformed bars for reinforcement shall be hot-rolled steel in accordance with CAN/CSA G30.18-M92 (R1998), Grade 60 (Grade 400).
- D. Deliver, store, and handle all materials in accordance with manufacturer's instructions.

PART 3: EXECUTION

3.01 Concrete Removal

- A. Remove loose or delaminated concrete.
- B. Undercut all exposed reinforcing by removing concrete from the full circumference of the steel. The clearance between the concrete substrate and reinforcing steel shall be $\frac{3}{4}$ inch (19 mm) or $\frac{1}{4}$ inch (6 mm) larger than the top size aggregate in the repair material, whichever is greater.
- C. Concrete removal shall continue along the reinforcing steel until there are no visible signs of corrosion.

3.02 Cleaning and Repair of Reinforcing Steel

- A. Clean exposed reinforcing steel of rust, mortar, etc. to provide sufficient electrical connection and mechanical bond.
- B. If significant reduction in the cross section of the reinforcing steel has occurred, replace or install supplemental reinforcement as directed by the engineer.
- C. Secure loose reinforcing steel by tying tightly to other bars with steel tie wire.

3.03 Edge and Surface Conditioning of Concrete

- A. Concrete patches shall be square or rectangular in shape with squared corners.
- B. Sawcut the patch boundary $\frac{1}{2}$ inch (13 mm) deep or less if required to avoid cutting reinforcing steel.
- C. Create a clean, sound substrate by removing bond-inhibiting materials from the concrete substrate by high pressure water blasting or abrasive blasting.

3.04 Galvanic Anode Installation

- A. Galvanic anodes shall be installed along the perimeter of the repair or interface at spacing as specified on the drawings. In no case shall the distance between anodes exceed 30 inches (750 mm).
- B. Provide sufficient clearance between anodes and substrate to allow repair material to encase anode.
- C. Secure the galvanic anodes as close as possible to the patch edge using the anode tie wires. The tie wires should be tightened to allow little or no free movement.
 - 1. If the anode is to be tied onto a single bar, or if less than 1 inch (25 mm) of concrete cover is expected, place anode beneath the bar and secure to clean reinforcing steel.
 - 2. If sufficient concrete cover exists, the anode may be placed at the intersection between two bars and secured to each clean bar.
- D. Electrical Continuity
 - 1. Confirm electrical connection between anode tie wire and reinforcing steel by measuring DC resistance (ohm, Ω) with a multi-meter.
 - 2. Confirm electrical continuity of the exposed reinforcing steel within the repair area. If necessary, electrical continuity shall be established with steel tie wire.
 - 3. Electrical continuity is acceptable if the DC resistance measured with multi-meter is less than 5 Ω .

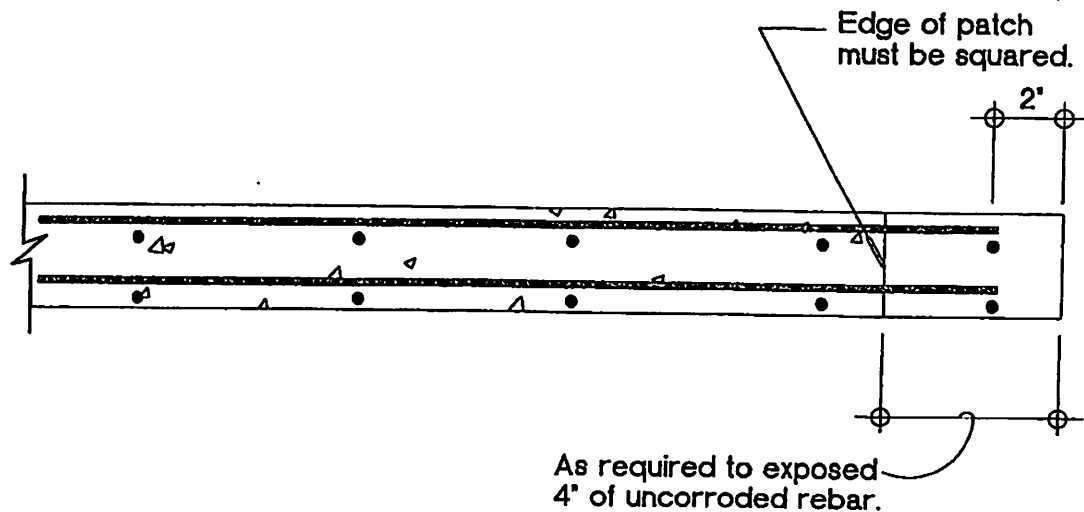
3.05 Concrete Replacement

- A. Repair material shall have a resistivity below 15,000 ohm-cm. Products with significant polymer modification and/or silica fume content may not be suitable. Similarly, if bonding agents are used, they shall have suitable conductivity. Insulating materials such as epoxy bonding agents shall not be used.**
- B. Complete the repair following normal concrete repair procedures, taking care not to create any air voids around the embedded galvanic anode.**

END OF SECTION

DETAILED

**D
R
A
W
I
N
G
S**



REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original 'white metal' condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Bonding agent shall be as described in the specifications.
8. Cure and finish as required in the specifications.

Spalled Edge Repair Detail

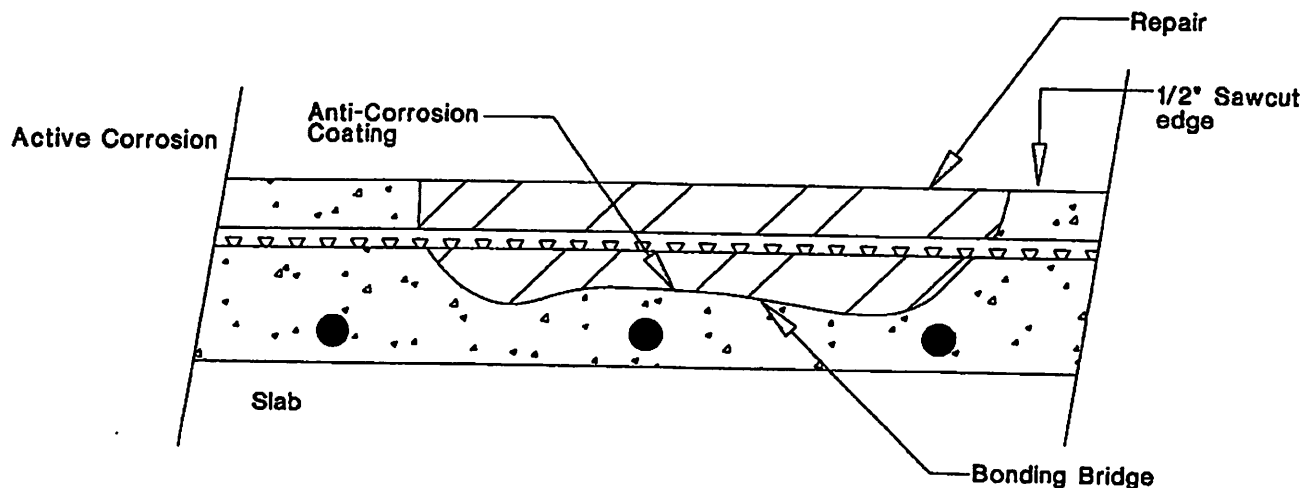


A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408

Deck Spalls



REPAIR PROCEDURES:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 6 inches of uncorroded rebar is observed.
4. Sandblast the concrete and expose the rebar. All scale shall be removed from rebar, restoring bars to their original 'white metal' condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Bonding agent shall be as described in the specifications.
8. Cure and finish as required in the specifications.

FLOOR SPALL REPAIR DETAIL



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408

GENERAL REQUIREMENTS

1.0 PROJECT LOCATION:

The Champlain Towers South Condominium project is located at, 8777 Collins Ave. Town of Surfside, Florida 33141

2.0 SCOPE OF WORK:

- A. The work to be performed by the CONTRACTOR includes furnishing all materials, labor, tools, equipment, whatsoever, transportation, supervision, temporary construction of any nature whatsoever necessary to modify, construct, remedy, complete, deliver, and place in operation the subject project as herein described and specified. All work shall be in accordance with the contract documents.

The specifications are intended to include everything required and necessary for the proper installation of the work, whether each necessary item is mentioned herein or not, unless otherwise specified, and the CONTRACTOR is expected to provide the same.

All work herein specified called for in the specification, or in detailed drawings shall be executed in accordance with all governing ordinances, laws and regulations and shall meet local conditions and any change and/or conditions will be made without additional expense to the OWNER, but such changes shall have the prior written approval of the OWNER.

3.0 INTENT OF DOCUMENTS:

- A. The documents are intended to outline procedure(s) and furnish guidelines to which the proposed work or part thereof which shall be constructed in accordance with the Contract Documents.

4.0 SUBMITTALS:

- A. The CONTRACTOR shall submit, with a letter of transmittal to the ENGINEER and two (2) sets of checked and approved product specifications. Allow a minimum of two weeks from the date of receipt for review by the ENGINEER. Review of the product specifications will be general and will not relieve the CONTRACTOR from any responsibility.

5.0 QUALITY CONTROL:

- A. Field Observations:

Forty-eight (48) hours notification to the ENGINEER by the CONTRACTOR shall be required for all specified field observations, unless otherwise noted.

6.0 MAINTENANCE OF TRAFFIC:

- A. The CONTRACTOR shall arrange his work to cause minimum disturbance of normal pedestrian and vehicular traffic and be responsible for providing suitable means of access to all public and private properties during all stages of construction. Other than for an emergency safety condition, the CONTRACTOR must contact the OWNER and ENGINEER for approval prior to completely blocking off any street or parking to vehicular traffic during construction.
- B. The CONTRACTOR shall make accommodations to provide access to the individual units, at the end of each work day, and submit their recommendations to the OWNER and ENGINEER for approval.

7.0 PLACING EQUIPMENT INTO SERVICE:

- A. Electrical equipment shall not be energized, or placed into service, nor shall mechanical equipment be operated by the contractor until approved by the OWNER and ENGINEER. Such approval shall be granted only after all interested parties have been duly notified in writing, have given approval for placing the equipment into service, and all interested parties are present or waived their right to be present. The CONTRACTOR shall notify the OWNER and ENGINEER a minimum of twenty four (24) hours or as far as in advance as possible of the dates that various items and equipment will be completed and ready for start-up.

8.0 STORAGE AND USE OF PREMISES:

- A. The CONTRACTOR shall confine his apparatus, materials storage and operations of personnel to the limits indicated by the OWNER or ENGINEER. All materials used on the project shall be stored in a single place designated by the OWNER or ENGINEER. The storage area shall be kept clean and the CONTRACTOR shall be liable for damages to surrounding areas.
- B. Flammable materials and/or any other fire hazardous materials shall be stored, handled and use in an approved manner in accordance with all local codes and ordinances.

9.0 ACCESS TO AREAS OF PROPOSED WORK:

- A. The work to be performed to the west face walkways shall be accessed through the stairwells at the north and south ends of the building. The use of the elevator shall only be granted upon receipt of a written request and shall be subject to the approval of the OWNER or ENGINEER.
- B. The work to be performed to the east face balconies shall be accessed from the exterior of the building through the use of swing stages and/or types of approved mechanical apparatus. Under no circumstance shall the CONTRACTOR be able to access the individual units through the west face doorway without being accompanied by the OWNER or ENGINEER.

10.0 PROTECTION OF THE UNIT INTERIORS:

- A. The CONTRACTOR shall construct temporary barriers for each individual unit having work performed to their balconies and prior to the removal of the sliding glass doors and submit a scaled drawing detailing the barrier construction and all materials for approval by the OWNER and ENGINEER.
- B. The construction of the temporary barrier wall and the removal of the sliding glass doors shall require displacement of the carpeting which shall be rolled back approximately four (4) feet from the sliding doors. The CONTRACTOR shall replace all rusted and/or damaged tack strips prior to relaying the displaced carpet.
- C. Upon completion of the proposed work to the individual unit balconies, the CONTRACTOR shall be responsible to repair, replace any item or component of the unit interior damaged during the repairs the balconies. All disputes and/or claims of damage shall be reviewed in accordance with the general conditions.
- D. Should adverse conditions such as sever storms or hurricanes be forecasted to effect the project area, the CONTRACTOR shall be responsible for reinstalling all apparatus such as hurricane shutters and sliding glass doors to insure the protection of the units interiors.

11.0 PROJECT RECORD DOCUMENTS:

- A. The CONTRACTOR shall keep one record copy of all Specifications, Drawings, Agenda, Modifications, Shop Drawings and Samples at the site, in good order and annotated to show all changes made during the construction process.

SECTION 0400
CONCRETE AND STUCCO
RESTORATION

1.0 RELATED DOCUMENTS:

Drawings, related documents and general provisions of the contract, including general and supplementary conditions and specifications, apply to this work of this section.

2.0 SCOPE OF WORK:

- A. The CONTRACTOR shall provide all labor, material, testing, tools, equipment, and product to remove existing materials and remedy, complete, deliver and construct the work to be specified herein.
- B. Work shall include:
 - Applications and permits for performing the work.
 - Removal and hauling of all materials.
 - Testing of a sample area to determine chloride content of the concrete.
 - Preparation of the affected surfaces and substrates.
 - Placement of the approved materials on affected areas.
 - Removal of all equipment and debris upon completion of work.
- C. The CONTRACTOR shall submit three (3) samples of all materials as specified or approved equals and as otherwise requested by the ENGINEER, including but not limited to the following:
 - 1. Manufacturer's Literature: Descriptive data including recommendations for mixing, application and curing.
 - 2. Test Reports: Manufacturer's certified test reports showing compliance with the specification requirements.
- D. Provide material certificates signed by the manufacturer and contractor, certifying that each material item complies with, or exceeds the specified requirements set forth in the CONTRACT DOCUMENTS.
- E. The CONTRACTOR shall conduct tests to determine the chloride content gradient of the concrete to avoid increased corrosion potential. All test areas shall be subject to approval by the ENGINEER.

3.0 STANDARDS:

- A. Concrete work shall conform to all requirements of ACI 301-99, "Specifications for Structural Concrete Buildings", except where modified in this or other sections of

the specifications.

- B. The CONTRACTOR shall familiarize himself with the requirements of ACI 301 in all respects and all modifications as stated in these specifications.
- C. The CONTRACTOR shall familiarize himself with the requirements of the manufacturer of the products being used in this application, in all respects.

4.0 QUALITY ASSURANCE:

- A. The CONTRACTOR shall be qualified and experienced in the work of this scope and scale, having demonstrated experience for five (5) years and shall provide locations of work and references for review by the OWNER and ENGINEER.
- B. The CONTRACTOR shall be an approved CONTRACTOR of the manufacturer of the specified product, who has completed a program of instruction in the use of the specified repair materials and provide a notarized certification from the manufacturer attesting to their APPROVED CONTRACTOR status.
- C. At the discretion of the ENGINEER, bids shall be accepted from a contractor other than an APPROVED CONTRACTOR of the manufacturer of the specified product. Said CONTRACTOR shall provide the ENGINEER with five job references where they have successfully repaired any structural and/or non-structural cracks with the specific product.
- D. Prior to proceeding with the work described herein, the CONTRACTOR shall finish one complete area as a demonstration of the product, where designated by the ENGINEER, clearly indicating color, finished texture, materials and workmanship. The sample area, when accepted by the ENGINEER, shall serve as a minimum standard for the work throughout the entire project.
- D. The APPROVED CONTRACTOR of the manufacture of the specified products and the manufacturer shall provide the OWNER with a joint and several guarantee on the application and product covered in this specification for a period of not less than five (5) years from the date of substantial completion of the project.

5.0 SCHEDULING AND APPLICATION CONDITIONS:

- A. A bi-monthly progress and ultimate work schedule shall be furnished by the CONTRACTOR for approval and shall be based upon the contract completion date. The CONTRACTOR shall advise the OWNER of the areas in which work is to be performed in advance of the scheduled work to permit the notification of the individual unit owners to move furniture, vehicles, etc.
- B. The CONTRACTOR shall meet with the OWNER and ENGINEER for the purpose of inspecting and monitoring the work performed. The CONTRACTOR shall give the ENGINEER at least 48 hours notice prior to an inspection. Any discrepancies and/or deviations from the plans and/or specifications shall be reported

immediately, in writing, to the OWNER and ENGINEER.

- C. Application of all materials shall be performed in dry weather and temperatures of 50 degrees or higher. Exterior work shall be halted to permit materials to set up or harden before condensation by night temperature drop occurs. Do not proceed with application of any material until surfaces are moisture free.

6.0 DELIVERY, STORAGE AND HANDLING:

- A. The delivery of the specified products shall be in their original, unopened containers with the manufacturer's name, label, product identification and batch numbers.
- B. All products shall be stored and conditioned as recommended by the manufacturer.

7.0 SURFACE CLEANING & PREPARATION:

A. Demolition of Existing Chattahoochee, River Rock, or Poly Pebble Surfaces: (If Applicable)

- 1. The existing epoxy encapsulated pedestrian decks, and walkways shall be removed to the concrete surface by means of mechanical abrading, blast tracking scarifying., grinding, sand blasting and/or manual spudding.

B. Demolition of Existing Tile, Paver, Slate Deck Surfaces: (If Applicable)

- 1. Existing decks tiles, pavers, slate shall be spudded off according to industry standards.
- 2. All materials shall be removed, cleaned by means of mechanically abrading, blast tracking, or scarifying, according to industry standards, to provide a sound substrate for the approved material installation.

C. Removal of Existing Carpeting and Carpet Glue, Tack Strips, Etc. (If Applicable)

- 1. Existing carpeting on areas to be treated shall be totally removed and discarded.
- 3. All materials shall be removed, cleaned by means of mechanically abridging, blast tracking, or scarifying, according to industry standards, to provide a sound substrate for the approved material installation.

D. Blast Tracking and Abrading of Floor Substrate:

- 1. All floor surface substrates shall be blast tracked and/or sand blasted in order to remove surface film contaminates, and existing coatings, to profile the surface to receive the new surface material and insure an adequate bonding profile.

E. Mechanical Planing/Scarifying:

- 1. The floor surface shall be scarified/mechanically planed utilizing approved

machinery, according to industry standards, to remove all surface contaminants which were not removed after blast tracking and/or sand blasting to score the substrate surface in order to provide an adequate bonding profile for the approved surface material application.

F. Hydro Blasting:

1. The exposed concrete substrate shall be thoroughly hydro blasted. The hydro blasting equipment shall be of a size and capacity to deliver a minimum of 5000 pounds per square inch (psi), with a minimum water volume usage of 10 gallons per minute (gpm).
2. A chlorine/detergent solution shall be applied to all surfaces prior to hydro blasting to remove fungus, dirt, atmospheric pollutants, salt residue, chalking and existing deteriorated materials. The solution may be applied with a garden type spray equipment, or by utilizing siphon tip assembly on hydro blasting equipment, prior to the final hydro blasting.
3. Areas exhibiting efflorescence deposits shall be treated with a 10% to 25% solution of muriatic acid to water mixture, scrubbed with stiff bristle brushes and thoroughly rinsed with pure water to neutralize acidity.
4. Cleaning of all the surfaces to be coated or otherwise be treated shall be phased according to project size and scope of work in order to avoid surface re-contamination prior to further treatment.
5. Planted areas, foliage, etc. shall be lightly rinsed with clean water to remove any chalk and/or residue and dilute any chemical residue deposits as a result of the surface preparation procedures.

H. Preparation and Treatment to Rust and Iron Deposits on the Masonry Surfaces

1. During the hydro blasting process, remove all rust and iron deposits from masonry surfaces with a solution of 10% to 25% oxalic acid and water mixture, or equal, and scrub with a stiff bristle brush and rinse thoroughly with pure water.

I. Removal and Replacement of Caulk

1. During the preparation of the designated surfaces all caulking material which runs around the perimeter or at the intersection of various facades shall be removed by cutting out the caulking in the affected area.
2. Upon completion of the surrounding surface preparation all joints shall be filled with a two part polyurethane material to prevent moisture penetration and allow for minimal movement. The material to be used shall be approved by the ENGINEER.

J. Inspection of Cleaned Surfaces

1. All substrate and/or prepared surfaces shall be carefully inspected by the ENGINEER and product manufacturer representative and further abrading/scoring, as required, in order to provide a surface free of debris and with adequate texture bonding for the subsequent product application.
2. If the method the CONTRACTOR has chosen to prepare the surface has not adequately removed all foreign material down to clean substrate, the OWNER and/or ENGINEER can direct the CONTRACTOR, at no additional cost to the OWNER, to use an alternative method to prepare the affected surfaces in accordance with the specifications.

K. Debris Storage and Removal

1. All demolished materials, dirt, and/or debris removed from all the substrate surfaces shall be cleaned on a daily basis and deposited in dumpster(s) supplied by the CONTRACTOR and shall be hauled and/or deposited in sanitary landfills according to state and local regulations at no cost to the OWNER.
2. The CONTRACTOR shall clean the project work site daily and remove all debris from the work areas prior to leaving the site.

8.0 PREPARATION AND REPAIR TO CONCRETE SURFACES:

A. Repair of Spalled Concrete:

1. All areas exhibiting spalling characteristics and/or hollow soundings shall be chipped out with sledge hammers and/or hand held chisels or jack hammers (max. 15 lb.) to the end of the observed deteriorated areas exposing all underlying substrates.
 - a. For repair volumes that extend to over 4" depth in any continuous spall, complete through slab area or cutout area, the repair shall be made with cast in place concrete as described in Section 1000 of the CONTRACT DOCUMENTS. The edges of the areas to be repaired are to be prepared with the application of an approved bonding agent.
 - b. For repair volumes that do not exceed 4" depth in any continuous spall or cutout area, the repair is to be made with a polymer modified cement materials specified for this job. The edges of the areas to be repaired are to be prepared with a slurry coating of the repair mortar, or with the application of a 2-component, solvent free, moisture insensitive epoxy bonding/grouting adhesive.
2. The perimeter of the spalled area(s) shall be saw cut out to a depth of one quarter (1/4) inch and a minimum of one (1) inch from the affected surface to provide angled edges for the patching material to bond and prevent the deterioration of the patched area edges. The angle edge shall be cut away from the spalled area to provide a mechanism to hold the patch material in place. All material shall be removed within the saw cut perimeter to provide a minimum of one half (1/2) of an

inch depth of patch material.

3. When removing material from the designated areas, by approved methods and tools, the contractor shall begin work from the perimeter of the effected area and work in the direction towards the areas center.
4. All deteriorated and/or exposed reinforcement shall be cut back or cut out, if required, to the end of the deterioration and/or to a minimum of 3 inches beyond the deteriorated reinforcement, according to manufactures specifications. Should the cross-sectional area of the affected reinforcement bar be reduced by more than 25%, a new reinforcement bar must be installed of matching size and insuring proper overlap of at less thirty (30) bar diameters.
5. All remaining exposed reinforcement shall be cleaned by either sand blasting and/or mechanically abraded to remove all oxidation.
6. All reinforcement surfaces shall be totally free of debris, moisture, grease or other substance prior to application of the protective materials.
7. Once the reinforcement has been cleaned and dried, totally encapsulate/prime the treated reinforcement with a 2-component, polymer modified, epoxy encapsulating adhesive/bonding agent with anti-corrosion properties around the full diameter of the prepared reinforcement, and allowed to dry. All procedures shall follow the manufacturer's recommendations and shall be inspected by the ENGINEER.
8. The totally cleaned and dried spalled area/void shall than have an approved bonding agent applied to entire the surface area to insure adequate bonding of the existing concrete to the materials to be used in the next stage of the process.
9. Fill the bonding agent treated spalled area/void with a high-grade, high strength polymer modified concrete/ hydraulic cement, depending on the size and depth on the repair area, fill to match existing grade following manufacturer's recommended procedures.
10. All grout/hydraulic cement and bonding agent shall be mixed according to manufacturer's recommendations to enhance the mixes adhesion and prohibit cracking.

9.0 RAILING/POST REPAIR:

1. Embedded items in the concrete, such as railing posts, made of aluminum, steel or other metallic material which have been determined to be loose, deteriorated and/or previously anchored by external measures are to be removed by approved methods and the penetration location cleaned out in accordance with manufacturers specifications and without causing damage to the railing post or the surrounding concrete deck. The cleaned out penetrations are to be filled and the railing posts are to be embedded in a minimum of 1" surrounding thickness of a high modulus, 2-component, solvent free, moisture insensitive, non-shrinking, epoxy

bonding/grouting adhesive material as manufactured by Sonneborn or approved equal.

2. Embedded fasteners and accessories, if required to further strengthen the stability of the handrails, are to be made of ASTM A316 stainless steel, especially where used to secure aluminum components to the concrete. All penetrations required to fasten the component to the concrete are to be sealed either by the application of a silicon sealant to the fastener or by bedding the component in an approved epoxy material to assure proper adhesion and against moisture penetration. The placement of such fasteners shall in no way interfere with the drainage of the surrounding concrete surface.
3. If the affected handrails bases are deteriorated to a point where adequate structural reinforcement will not be provided by placement of external accessories, inserts of similar material shall be used to reinforce the railing posts. The inserts shall be embedded into the concrete slab and inserted into the main railing posts and bolted for stability. The cut sheets of the proposed inserts shall be submitted and reviewed by the OWNER and ENGINEER prior to final approval for placement.
4. The contractor shall take precautions to prevent dissimilar metals from coming into contact with each other by providing insulating materials and/or sleeves between the two dissimilar metals of approved thickness and composition.
5. All railing post penetrations, in used and/or previously filled, shall be filled to slab grade and crowned with approved materials and methods to improve stability and prevent moisture from collection around the railing posts.

10.0 CRACK REPAIR:

1. Treatment to Deck Cracks

- a. All surfaces to be repaired shall be clean, dry, and free from dirt, grease, oil, loose or peeling paint, chalk, salt or other surface contaminants which would act as a bond breaker to the repair materials.
- b. Cracks of 1/16th inch in width or larger shall be cut out using suitable tools, enlarging the crack to permit sufficient application of the approved materials.
- c. All areas surrounding the crack, where excessive dust is evident, shall be sealed with methyl ethyl ketone or denatured alcohol, according to approved manufacturer's specifications and industry standards, to provide a sound bonding surface for the new sealant.

4. Application of Approved Repair Materials:

- a. Shrinkage cracks of 1/32th inch or less in width, after proper preparation, shall be filled with a liquid application epoxy resin material sealer or other approved materials and one (1) layer of fiberglass mesh, in accordance with manufacturer's recommendations, and allowed to set.

- b. Movement cracks of 1/16th to 1/4th inch in width shall be cut or ground out and cleaned and primed in accordance with the specifications. Injection ports shall be placed at equal spacing of six (6) inch intervals or less. The ports shall be set in approved epoxy gel applied to the entire length of the crack and built up around the ports and given adequate time to set, prior to starting the injection process. The injection of the gel shall be performed using a machine-operated hydraulic pumping system and ensuring that the gel has flowed to each port. This method is done by clamping off ports where the injected gel is observed flowing out and repeating injecting the previously injected ports to insure the gel has completed filled the void.

11.0 PREPARATION AND TREATMENT OF EXPANSION JOINTS:

1. Surfaces to be repaired must be clean, dry and free from dirt, grease, oil, loose and/or peeling paint, caulk, salt or other surface contaminants which may act as a bond breaker to the new materials. All existing deteriorated sealant materials and/or joints designated for repair shall be cut out completely. Dress the joint's side walls with grinders to remove all foreign materials and install new backing rods as necessary, for standard joints or proper strip backing for wide expansion joints, to provide proper depth-to-wide ratio and prevent three-point adhesion failure.
2. **Installation of Primer:**
 - a. Joint wall substrate shall be inspected for weak and/or deteriorated areas and repaired where necessary.
 - b. Clean the joints side walls with methyl ethyl ketone or denatured alcohol. Chalked and/or masonry surfaces (interior joint side walls) shall be primed with sealant the manufacturer has recommended primer to assure permanent adhesion.
3. **Sealant Installation:**
 - a. Install all of the joint sealant material with caulking and/or glazing tools, filling the joint completely by following the manufacturer's recommended method of material placement.
 - b. At perimeter caulking applications (90 degrees) or as necessary, where a triangular fillet is required such as a floor-to-wall joint, thresholds, door tracks, etc. care must be taken to insure that an adequate bonding area to each substrate can be maintained. Under no circumstances should the bonding area of the sealant beads be less than 1/4 inch or manufacturer's recommended minimum area.
4. **Installation of New Expansion Joints:**
 - a. New joints shall be cut using power saws with carbonated blades, cut new joints to the proper depth and width as follows:

- i. The new joint should be a minimum of four times the anticipated movement or sized in accordance with the manufacturer's recommendations.

- ii. Minimum sealant joints:

1/4" x 1/4" Depth of the joint should not exceed the width from 1/4" to 3/4".

1/2" x 1/2" Depth of the joint should not be more than 1/2" to 5/8" (plus the required depth of the backing rod, if required).

- a. A closed cell polyurethane or neoprene backing rod shall be used to control the depth of the joint sealant material application and to prohibit three-point adhesion failure. Extreme caution must be taken when placing the backing rod so as not to puncture the rod.
- b. Where the joint depth does not permit use of regular joint backing, a release paper (bond breaker) or releasing tape shall be utilized.
- c. Maximum Joint Size: Approximately two (2) inches in wide by 5/8 inches in depth plus the diameter of the backing rod, if required.
- d. Install Sealant to joint as detailed and tool with flat hand tools or by product manufacturer's approved methods.

12.0 STUCCO REPAIR:

1. Description of Work:

- a. The scope of work shall be as outlined in Part 3 hereof.

2. Submittals:

- a. The Contractor shall submit to the Engineer product specification sheets for review and approval. Prior to the beginning of work the Contractor shall submit to the Engineer samples of the proposed product to be used for each particular item of repair. Additionally, the Contractor shall provide areas for a sample of the work to be performed.

3. Delivery and Storage:

- a. All materials shall be delivered to the site in original, new, unopened packages, containers, or wrappings bearing the manufacturer's name and label which shall include the product name, material identification number, stock number, color name and number, manufacturer's name, instructions for usage and coverage, and any other pertinent information.

4. Job Conditions:

- a. The job site shall be maintained in a neat and orderly fashion and shall be cleaned at the end of each workday. Protection of the property from damage while performing the proposed work shall be the sole responsibility of the Contractor. All work shall be completed in a timely manner in accordance with the repair specifications.

5. Surface Preparations:

- a. All paint shall be removed 6" from the edge of each side of the repair. (1) Layer of 4" fiberglass mesh shall be installed where the new stucco meets the old stucco to prevent cracking. An approved stucco-bonding agent shall be applied onto the prepared surface.
- b. All surfaces shall be properly prepared and cleaned prior to the application of any material. All exterior surfaces to be painted or coated shall be pressure cleaned at a minimum pressure of 2500 PSI to remove all dirt, mildew, caulks paint, and any foreign materials. Cleaning solutions may be used to remove any foreign material but shall be rinsed off prior to application of any material. Any loose and/or scaling paint, or deterioration uncovered during the high pressure cleaning shall be removed, or repaired to provide a sound substrate for the application of the materials.

13.0 EPOXY INJECTION:

1. The area surrounding the crack to be injected shall be clean of efflorescent, deteriorated concrete and other contaminants that may be detrimental to the adhesion of the epoxy gel. If unsound or deteriorated concrete is located next to the crack, all unsound or deteriorated concrete shall be removed prior to the injection.
 2. Install injection ports at appropriate intervals to accomplish full penetration of the injection adhesive. The final spacing of the ports shall be determined by the size of the crack, the depth of the substrate and the orientation of the injection. At no time shall the spacing exceed eight (8) inches. The injection ports shall be installed using one or more of the following methods. The CONTRACTOR performing the WORK shall be responsible for the method or form WORK as described in this section. However, the drilled in method shall be used when the crack width is less than .002 inches.
1. Surface Mounted Injection Ports:
 - a. Center the injection ports over the crack and secure in place using epoxy gel. Where possible, install the injection ports over the widest areas along the length of the cracks.
 - b. Completely seal the exposed crack located between the injection ports and other areas, as required to prevent leaking of the adhesive, using epoxy gel. The epoxy gel shall be neatly applied at an approximate thickness of 1/16" to 1/8".

- c. If the crack extends through the member, and if accessible, install telltale injection ports on the opposite side and seal all exposed areas of the crack. Generally, the spacing of the telltale injection ports should be twelve (12) to Twenty-four (24) inches.

2. Drilled In Injection Ports:

- a. A vacuum attached swivel drill chuck and hollow drill bits shall be used for all drilled in injection ports to reduce the possibility of concrete dust, produced during the drilling, from sealing the crack and blocking the resin flow.
- b. The holes shall be drilled with a minimum 5/8" inch depth. Exercise care so as not to drill beyond a crack which may be running at an angle to the surface.
- c. The injection ports shall be inserted into the drilled holes about 1/2 inch, allowing for a small reservoir below the injection port. Secure the injection ports into position using epoxy gel.
- d. When cracks to be injected have sealants, debris or other contaminants inside and when determined by the CONTRACTOR OR ENGINEER, these cracks shall be flushed out using water or air under high pressure.

14.0 GENERAL NOTES:

- 1. All specified and otherwise approved materials must be prepared for and mixed as required, prepared and placed in strict accordance with the manufacturer's recommendations.
- 2. No material, even if specified, shall be placed until the contractor has submitted product information sheets on each material to be used and has received approval from the ENGINEER.
- 3. Shoring shall be used under all areas which are being worked upon or show signs of excessive deflection and/or hazardous conditions. Shoring calculations must be submitted to the ENGINEER prior to the placement and/or use of any shores in accordance with the CONTRACT DOCUMENTS.
- 4. No material shall be placed until the ENGINEER has observed and approved the preparation of each location where said specified material is to be used.
- 5. Exhaustive measures shall be taken to protect the site doors from any type of damage as result of the completion work. If interior work is required, the contractor shall submit drawings, detailing all precaution measures to be taken.

Section 0500

CAST-IN PLACE CONCRETE

1.0 RELATED DOCUMENTS:

Drawings, related documents and general provisions of the contract, including general and supplementary conditions and specifications, apply to this work of this section.

2.0 SCOPE OF WORK:

A. The CONTRACTOR shall provide all labor, material, testing, tools, equipment, and product to remove existing materials and remedy, complete, deliver and construct the work to be specified herein.

B. The work shall include:

- Applications and permits for performing the work.
- Removal and hauling of existing materials
- Testing of a sample area to determine chloride content of the concrete.
- Preparation of the affected surfaces and substrates
- Placement of the approved materials on affected areas
- Removal of all equipment and debris upon completion of work.

C. The CONTRACTOR shall submit two (2) samples of all materials as specified herein and/or as otherwise requested by the ENGINEER, including:

- 1. Manufacturer's Literature: Descriptive data including recommendations for mixing, application and curing.

- 2. Test Reports: Manufacturer's certified test reports showing compliance with the specification requirements.

D. Provide material certificates signed by the manufacturer and contractor, certifying that each product complies with, or exceeds the specified requirements set forth in the contract documents.

E. The CONTRACTOR shall conduct tests to determine the chloride content gradient of the concrete to avoid increased corrosion potential. All test areas shall be subject to approval by the ENGINEER.

3.0 STANDARDS:

A. Concrete work shall conform to all requirements of ACI 301-99, "Specifications for Structural Concrete Buildings", except where modified in this or other sections of the CONTRACT DOCUMENTS.

- B. The CONTRACTOR shall familiarize himself with the requirements of ACI 301 in all respects and all modifications as stated in these specifications.
- C. The CONTRACTOR shall familiarize himself with the requirements of the manufacturer of the products being used in this application, in all respects.
- D. The Standard Building Code, 1991 Edition

4.0 SUPPLEMENTARY REQUIREMENTS TO ACI 301:

- A. Comply with Chapter 2 of ACI 301 and the Supplemental Requirements as stated herein:
- B. Cement - Type I or III of ASTM C150-85a.

C. ADMIXTURES:

1. Water reducing Admixtures: Eucon WR-75 by the Euclid Chemical Company, Pozzoloth 200N by Master Builders, or Plastocrete 160 by Sika Chemical Corp. The admixture shall conform to ASTM C494, Type A and not containing more chloride ions that are present in municipal drinking water.
2. Water Reducing, Retarding Admixture: Eucon Retarder-75 by the Euclid Chemical Company, Pozzoloth 100XR by Master Builders or Plastiment by Sika Chemical Corp. The admixture shall conform to ASTM C494, Type D, and not containing more chloride ions than are present in municipal drinking water.
3. High Range Reducing Admixture (Superplasticizer): Eucon 37 by the Euclid Chemical Company, or Sikament by Sika Chemical Corp. The admixture shall conform to ASTM C494-86, Type F or G, and not containing more chloride ions than are present in municipal drinking water.
4. Non-Chloride Accelerator: Accelguard 80 by the Euclid Chemical Company, or Darex Set Accelerator by W.R. Grace. The admixture shall conform to ASTM C494-86, Type C or E, and not containing more chloride ions than are present in municipal drinking water.
5. Air Entraining Admixtures: Conforming to ASTM C260.
6. Calcium Chloride: Calcium chloride or admixtures containing more than 0.1% chloride ions are not present.
7. Certification: Written conformance to the previously mentioned requirements and the chloride ion content will be required from all admixture manufactures prior to the mix design review by the ENGINEER.

4.0 PROPORTIONING:

- A. Comply with Chapter 3 or ACI 301 and the Supplemental Requirements as stated herein:

B. Strength: Concrete slabs, designated as "Concrete Pavement" and subject to pedestrian traffic, shall have a 28-day compressive strength of not less than 4000 PSI and a flexure strength (modulus of rupture) of not less than 650 PSI when tested in accordance with the "Method of Test for Flexural Strength of Concrete (using simple beam with third point loading), ASTM C78-99.

C. Durability:

1. General:

- a. Concrete required to be air entraining shall contain the " Air Entraining Admixture", and air content shall comply with table 3.4.1 of ACI 301.
- b. All pumped concrete shall contain "High Range Water Reducing admixture".
- c. The "Water Reducing", Type A, or "Water Reducing and Retarding, Type D admixtures complying with ASTM C494-86 may be used at the option of the contractor.
- d. All concrete containing the "High Ranging Water Reducing Admixture" (Superplasticizer) shall have a maximum slump of 8 inches or less otherwise directed by the ENGINEER. The concrete shall be proportioned for a verified slump of 2 to 3 inches, when the High Range Water Reducing Admixture is added to increase the slump to the approved level.
- e. All other concrete shall be proportioned to have a maximum slump of 4 inches.

2. All normal weight concrete shall be air-entrained. The amount of air-entraining shall be in accordance with Table 3.4.1 of ACI 301.

3. All other concretes shall abide by and be in conformance with paragraph 2.03 D(1) of ACI 301.

5.0 **FORM WORK:**

- A. All form work shall conform with Chapter 4 of ACI 301 and the Supplemental Requirements as stated herein:
- B. Earth cuts shall not be used as forms for vertical surfaces.
- C. Form ties that leave through holes in the concrete are not permitted.
- D. No forms shall be removed prior to the concrete achieving 75% of its design strength.

- E. Flat slab forms and stair slab forms shall not be removed for five days. Upon removal of the forms, shoring shall be placed and remaining in place until the concrete is a minimum of 14 days old.

6.0 REINFORCEMENT:

- A. All reinforcement shall comply with Chapter 5 of ACI 301 and the Supplemental Requirements as stated herein:

B. REINFORCING STEEL:

1. Bars #3 through #11 shall be deformed in accordance with ASTM A615-85, Grade 60, and in accordance with the additional requirements of Paragraph 5.2.2.1 of ACI 301.
2. Bars #2 in size shall be plain round ASTM A615-85, Grade 40.
3. Welded wire fabric shall be plain wire.
4. Unless indicated otherwise, the minimum concrete protective cover specified in Paragraph 5.5.1 of ACI 301 is the minimum specified cover.
5. Slab and beam bottoms shall have reinforcement placed on plastic tipped or zinc coated legs or chairs.
6. Any new placement of reinforcement shall be installed with a minimum of 30 diameters of overlap length.

- C. Rebar Couplers: Shall be threaded or swage connected to the reinforcing bars to be spliced. Any reinforcement to be welded shall be approved by the ENGINEER. The coupler shall be capable of developing 125% of the yield strength of the bar(s) in tension. In order to insure the proper orientation of the offset bars, the coupler connection of that bar must be swaged.

7.0 JOINT AND EMBEDDED ITEMS:

- A. All items shall comply with Chapter 6 of the ACI 301 and the Supplemental Conditions as stated herein:

B. EXPANSION JOINTS:

1. Premolded joint fillers shall be preformed bituminous type, conforming to ASTM D1751-83, for joints without sealant.

2. Premolded expansion joint fillers for joints with sealant and where indicated shall be non-extruding and resilient type in conformance with ASTM D1752-99 and compatible with urethane joint sealant compounds.

8.0 **PRODUCTION OF CONCRETE:**

A. All concrete shall comply with Chapter 7 of ACI 301 and the Supplementary Requirements as stated herein:

B. READY-MIX CONCRETE:

1. The contractor shall provide copies of each delivery ticket to the ENGINEER. The mix designation shall be included on the delivery ticket.
2. In no case shall concrete be cast-in-place which is over 90 minutes old from the time the mix was batched.

C. WEATHER CONDITIONS:

1. Where the relative humidity is less than the corresponding concrete temperatures placed, or intended to be placed, as indicated in the following Table, the contractor shall follow the recommendations of ACI 305R-77, "Hot Weather Concreting";

| <u>Concrete Temperature</u> | <u>Minimum Relative Humidity</u> |
|---------------------------------|------------------------------------------|
| 100 deg F | 80 |
| 95 deg F | 70 |
| 90 deg F | 60 |
| 85 deg F | 50 |
| 80 deg F | 40 |
| 75 deg F | 30 |

The above Table is based upon a wind speed of 10 mph. For ambient wind speeds in excess of 10 mph, the CONTRACTOR shall follow the recommendations of Fig. 2.1.5 of ACI 305R if the relationship of air temperature, wind speed, relative humidity and concrete temperature indicates a rate of evaporation in excess of 0.2 pounds per square foot per hour.

2. The requirements of paragraph 7.6.2 of ACI 301 (Cooling of Concrete Ingredients) are not waived.

9.0 **PLACING:**

A. Placement of all concrete shall comply with Chapter 8 of ACI 301 and the Supplemental Requirements as stated herein:

- B. Protection: When the temperature of the concrete exceeds the minimum relative humidity relationship specified in The Paragraph "Production of Concrete" the requirements of Paragraph "Production of Concrete Shall Control.

10.0 REPAIR OF SURFACE DEFECTS:

- A. The repair of all surface defects shall comply with the Supplementary Requirements as stated herein:
- B. With prior approval of the ENGINEER, as to the methods and procedures, all repairs of defective areas shall conform to ACI 301, Chapter 9.
- C. All defects designated as "structural" by the ENGINEER shall be repaired with prior approval of the ENGINEER, as to the methods and procedures, using epoxy adhesive and/or epoxy mortar materials submitted for approval in conformance with the procedures as outlined in CONTRACT DOCUMENTS.

11.0 CONCRETE SLABS:

- A. All cast in place concrete slabs shall comply with Chapter 10 of the ACI 301 and the Supplemental Requirements as stated herein:
- B. All finishes shall be in accordance with the Paragraph 11.8 of ACI 301 except for exterior slabs receiving tile, paver or similar coverings shall be troweled finished.

12.0 CURING AND PROTECTION:

- A. The curing and protection of the concrete shall comply with Chapter 12 of ACI and the Supplemental Requirements as stated herein:
 - B. The preservation of moisture shall be in accordance with Paragraph 12.2 of ACI 301.
 - 1. CURING AND SEALING COMPOUND: All compound shall conform to ASTM C-309_81, Type 1 or Type 1D, 30 % solids minimum content and have test data from an independent laboratory indicating a maximum moisture loss of 0.030 grams per sq. cm when applied at a coverage rate of 300 sq. ft. per gallon. The manufacturers certification is required.
1. CURING AND HARDENING COMPOUND: All curing and hardening compounds shall be sodium silicate type.
- 3. Apply all compounds in accordance with the manufacturer's recommendations and directions.
 - 4. All slabs, except for exterior walks and pavements, which are of exposed concrete in the finished structure shall receive a curing and sealing compound.

5. All slabs which are to receive cementitious or other toppings are to receive a curing and hardening compound.
6. The CONTRACTOR shall verify the compatibility of the compounds with the proposed applied coverings or toppings.
7. The CONTRACTOR shall submit all manufacturers product data for review by the ENGINEER.

C. APPLICATION OF CURING, SEALING AND HARDENING COMPOUNDS: Apply all compounds to the concrete floors and slabs in accordance with the manufacturers recommendation or as follows:

1. After the freshly poured concrete has been finished and hardened so not to allow marring by application, uniformly apply the undiluted compound by spray, brush or squeegee without allowing the compound to collect in low spots.
2. Keep all traffic off the compound applied surface until the surface is completely dry.

13.0 **TESTING:**

- A. All testing shall comply with Chapter 16 of ACI 301 and the Supplementary Requirements as stated herein:
- B. All testing of the concrete to review the materials, mixture, strength, slump, temperature, air content or any other information as required by the ENGINEER shall be conducted and paid for by the CONTRACTOR.
- C. Failure to meet the specifications, for whatever reason, and/or the replacement of the CONTRACTOR requiring additional testing, shall be paid by the CONTRACTOR.
- D. TESTING INTERVALS: For all concrete cast-in-place shall be tested at the following intervals:
 1. Strength test for concrete molds, cure and test five specimens, one at 3 days, one at 7 days and three at 28 days.
 2. Make one strength test for each 10 cubic yards or fraction thereof place in any one day.

- Slump tests are to be taken for every 10 cubic yards or fraction thereof placed in any one day.

SECTION 0600

MOISTURE PROTECTIVE COATINGS

1.0 RELATED DOCUMENTS:

Drawings, related documents and general provisions of the contract, including general and supplementary conditions and specifications, apply to the work of this section.

2.0 SCOPE OF WORK:

A. The CONTRACTOR shall provide all labor, material, tools, equipment, and product to remove existing materials and remedy, complete, deliver, construct the work to be specified herein.

B. The work shall include:

Applications and permits for performing the work.
Removal and hauling of existing materials
Preparation of the affected surfaces
Placement of the approved materials on affected areas
Removal of all equipment and debris upon completion of work.

C. The CONTRACTOR shall submit two (2) samples of all materials as specified and as otherwise requested by the ENGINEER, including the following:

1. Color Samples: Three (3), minimum 8 in. x 8 in. swatches of the manufacturer's full color range to the OWNER and ENGINEER for their selection.
2. Manufacturer's Literature: Descriptive data including recommendations for mixing, application and curing procedures.
3. Test Reports: Manufacturer's certified test reports showing compliance to specification requirements.

D. Provide material certificates signed by the manufacturer and contractor, certifying that each material item complies with, or exceeds the specified requirements set forth in the contract documents.

3.0 QUALITY ASSURANCE:

A. The CONTRACTOR shall be experienced in work of this scope and scale described herein, having demonstrated experience for a minimum of five (5) years and shall provide locations of work and references for review by the OWNER and ENGINEER.

- B. Prior to proceeding with the work as described herein, the CONTRACTOR shall finish one complete area as a demonstration of the specified product, where designated by the OWNER and ENGINEER, clearly indicating selected color, finished texture, materials and workmanship. The sample area, when accepted by the OWNER and ENGINEER, shall serve as a minimum standard for work throughout the entire project.
- C. The CONTRACTOR shall provide primers and other undercoat material produced by the same manufacturer as the finished coats. Use only thinners, where necessary, which are approved by the product manufacture, and use only in the recommended limits.
- D. The right is reserved by the OWNER to invoke the following material testing procedures, at any time, during the period of field application, at the expense of the CONTRACTOR:
 - 1. Engage the services of an independent testing laboratory to sample product being used. All sample materials delivered to the project site can be taken, identified and sealed, and certified in the presence of the CONTRACTOR. The testing laboratory shall perform tests to determine if the samples taken meet or exceed the outlined specified produce guidelines as stated herein.
 - 2. If the test results show that the material being used does not comply with the specified requirements, the CONTRACTOR may be directed to stop all work and remove the non-complying paint, pay for testing, repaint surfaces coated with the rejected paint, remove paint from the previously painted surfaces if, upon repainting with specified paint, the two coatings are non-compatible.

4.0 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. The approved materials shall be delivered in manufacturer's originally sealed containers with labels intact and legible, clearly identifying the manufacture, brand name, contents by volume, stock number and date of manufacture, application instructions, color name and number.
- B. All materials in original sealed containers shall be stored in an area designated by the OWNER and ENGINEER and at a temperature not less than fifty (50) and greater than (90) degrees Fahrenheit.

5.0 SCHEDULING AND APPLICATION CONDITIONS:

- A. Application of all materials shall be done in dry weather and temperatures between 50 to 90 degrees or unless otherwise permitted by the product manufacturer's printed instructions. Exterior work shall be halted to permit materials to set up or harden before condensation by night temperature drop occurs.

- B. The CONTRACTOR shall not proceed with application of materials in rain, fog or when the relative humidity exceeds 85%, and/or to damp or wet surfaces, unless otherwise permitted by the paint manufacturer's printed instructions.
- C. The CONTRACTOR shall provide adequate continuous ventilation in areas lacking natural ventilation.
- D. A progress and/or work schedule shall be furnished by the CONTRACTOR for approval and shall be based upon the contract completion date. The CONTRACTOR shall advise the OWNER of the areas in which work is to be performed in advance of the scheduled work to permit the notification of the individual unit owners to move furniture, vehicles, etc.
- E. The CONTRACTOR shall meet with the ENGINEER for the purpose of inspecting and monitoring the work performed. Any observed discrepancies shall be reported immediately, in writing, to the ENGINEER.

6.0 SURFACE CLEANING:

A. Blast Tracking and Sand Blasting of Floor Substrate:

- 1. The floor surface substrates shall be blast tracked and/or sand blasted in order to remove surface film contaminates, coatings, and to profile the prepared surface to receive the new surface material.

B. Mechanical Planing/Scarifying:

- 1. The floor surface shall be scarified/mechanically planed utilizing approved machinery, according to industry standards if the prepared surface does not display adequate bonding capabilities, to remove all surface contaminates and to score the substrate surface in order to provide bonding for the approved surface material installation.

C. Hydro Blasting:

- 1. The exposed substrate shall be thoroughly hydro blasted to remove any remaining foreign substances as determined by the ENGINEER. The hydro blasting equipment shall be of a size and capacity to deliver a minimum of 3000 pounds per square inch (psi), with a minimum water volume usage of 6 gallons per minute (gpm).
- 2. A chlorine/detergent solution shall be applied to all surfaces prior to hydro blasting to remove fungus, dirt, atmospheric pollutants, salt residue, chalking and existing deteriorated materials. The solution may be applied with a garden type spray equipment, or by utilizing siphon tip assembly on hydro blasting equipment, prior to the final hydro blasting.

3. Areas exhibiting efflorescence deposits shall be treated with a 10% to 25% solution of muriatic acid to water mixture, scrubbed with stiff bristle brushes and thoroughly rinsed with pure water to neutralize acidity.
4. Cleaning of all the surfaces to be coated or otherwise be treated shall be phased according to project size and scope of work in order to avoid surface re-contamination prior to further treatment.
5. Planted areas, foliage, etc. shall be lightly rinsed with clean water to remove any chalk and/or residue and dilute any chemical residue deposits as a result of the surface preparation procedures.

D. Preparation and Treatment to Rust and Iron Deposits on the Masonry Surfaces:

1. During the hydro blasting process, remove all rust and iron deposits from masonry surfaces with a solution of 10% to 25% oxalic acid and water mixture, or equal, and scrub with a stiff bristle brush and rinse thoroughly with pure water.

E. Inspection of Cleaned Surfaces:

1. All substrate surfaces shall be carefully inspected and further abrading/scoring, as required, in order to provide a surface free of debris and with adequate texture bonding for the subsequent product application.

F. Debris Storage and Removal:

1. All demolished materials, dirt, and/or debris removed from all the substrate surfaces shall be cleaned on a daily basis and deposited in dumpster(s) supplied by the CONTRACTOR and shall be hauled and/or deposited in sanitary landfills according to state and local regulations.

7.0 SURFACE PREPARATION:

- A. General: Perform surface preparation in accordance with the manufacturer's instruction and as herein specified, for each particular substrate condition.
- B. The CONTRACTOR shall provide barrier coats over incompatible primers or remove and prime again as required. The ENGINEER shall be notified, in writing, of any anticipated problems in using the specified coatings systems with the substrates and/or existing materials.
- C. Remove all hardware, hardware accessories, machined surfaces, plates, lighting fixtures and other items in place and not to be finish coated, or provide surface-applied protection prior to the surface preparation and coating operations. Remove, if any necessary, for complete coating of items and adjacent surfaces and following completion of work, reinstall removed items.

- D. All surfaces shall have a bonding agent and/or other materials applied prior to the application of the finish materials to insure adequate bonding between the existing surface substrate and the coating to be applied.

D. Cement Materials:

- 1. Prepare surfaces of concrete, concrete block, cement plaster and cement-asbestos board to be coated by removing efflorescence, chalk, dust, dirt, grease, oil, and by roughening, as required to remove glaze and insure adequate bonding.
- 2. The CONTRACTOR shall determine the alkalinity and moisture content of the surfaces to be coated by performing appropriate tests at the CONTRACTOR'S expense. If surfaces are found to be sufficiently alkaline to cause blistering and burning of the finish paint, correct the condition before application. Do not paint over surfaces where the moisture content exceeds that permitted in the manufacturer's printed specifications.

D. Ferrous Metals:

- 1. Clean ferrous materials, which are not galvanized or shop coated of oil, grease, dirt, loose mill and any other foreign substances by solvent or mechanical cleaning.
- 2. The CONTRACTOR shall touch-up shop applied coats where damaged or bare as required with the same type of primer and clean.

8.0 MATERIAL PREPARATION:

- A. The CONTRACTOR shall mix and prepare all materials in accordance with the manufacturer's directions. The containers used to mix and apply the materials shall be kept free and clean of foreign substances and residue.
- B. The CONTRACTOR shall stir material before application to produce a mixture of uniform density, and stir as required during application. Do not stir surface film into material. Remove film and, if necessary, strain materials prior to application.

9.0 APPLICATION OF MATERIAL:

- A. General: The CONTRACTOR shall apply all materials and use applicators, and application techniques best suited for the substrate and type of material being applied in accordance with the manufacturer's recommendations and in accordance with the desired finishes.
- B. The CONTRACTOR shall provide all coats and finished coats in accordance with the materials used. Apply additional coats when undercoats, stains and/or other conditions show through the final coat of the material, until the finish is of uniform finish, color, texture, and appearance.

- C. The application of the approved materials shall be applied in layers to achieve a built up composite material finish. More specifically the material shall be applied in the following manner; (2) sub-coats, (1) Troweled textured coat, and (2) Acrylic color coats. The textured finish shall simulate a agreed to size tile pattern. The sub-coats shall be applied in adequate amounts as to eliminate, as much as possible, the existing depressions and/or drainage problems of the surface to receive the material.

10.0 MINIMUM COATING THICKNESS:

- A. The CONTRACTOR shall apply all materials at not less than the manufacturer's recommended minimum spreading rate, to establish a total dry material thickness as indicated or, if not indicated, as a minimum rate as recommended by the manufacturer.

11.0 CLEAN-UP AND PROTECTION:

- A. The CONTRACTOR shall, during the progress of work, remove from the site discarded all materials, rubbish, cans, and rags at the end of each day.
- B. Upon completion of the work, The contractor shall clean window glass and other paint spattered surfaces by proper methods of washing and scraping, using care not to scratch or otherwise damage finished and/or surrounding surfaces.
- C. The CONTRACTOR shall protect all work of other trades, whether to be part of the work or not, against damage by material application and finishing work and shall be responsible for repairing and/or replacing any damaged items.
- D. The CONTRACTOR shall provide "wet paint or work in progress" signs as required to protect newly worked on finishes and remove any protective warping upon completion of work.
- E. The CONTRACTOR shall construct a barrier to protect the interior of each unit from any damage related to the work and/or exposure to the elements. The method and construction of the barriers shall be approved by the OWNER and ENGINEER.

SECTION 0700

EMBEDDED GALVANIC ANODES

PART 1: GENERAL

1.01 Related Documents

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 Summary

- A. This Section includes furnishing all labor, tools, materials, equipment, and services necessary to properly install embedded galvanic anodes.
- B. Embedded galvanic anodes are designed to provide localized corrosion protection. When placed at the appropriate spacing along the perimeter of concrete patches or along the interface between new/existing concrete, the anodes mitigate the formation of new corrosion sites in the existing concrete.

1.03 References

- A. ACI/ICRI 1999 Concrete Repair Manual or latest edition
- B. CAN/CSA A23.1 Standard for Repair Mortars, Concrete and Bonding Agents
- C. CAN/CSA G30.18-M92 (R1998) Billet-Steel Bars for Concrete Reinforcement
- D. ASTM B418-95a Standard
- E. G30.3-M1983 (R1998) Cold-Drawn Steel Wire for Concrete Reinforcement

PART 2. PRODUCTS

2.01 Materials

- A. Embedded galvanic anodes shall be puck-shaped approximately 2-1/2 inches in diameter by 1 inch high (63 mm x 25 mm), pre-manufactured, and consist of zinc in compliance with ASTM B418-95a Type I cast around a pair of steel tie wires in compliance with bright annealed G30.3-M1983 (R1998) and encased in a highly alkaline cementitious shell with a pH of 14 or greater. Embedded galvanic anodes shall be Galvashield™ XP available from Vector Corrosion Technologies (204) 489-6300, or approved equal.
- B. Repair mortars, concrete and bonding agents shall be Portland cement-based materials with suitable electrical conductivity. Non-conductive repair materials such as epoxy, urethane, or magnesium phosphate shall not be permitted.
- C. Deformed bars for reinforcement shall be hot-rolled steel in accordance with CAN/CSA G30.18-M92 (R1998), Grade 60 (Grade 400).
- D. Deliver, store, and handle all materials in accordance with manufacturer's instructions.

PART 3: EXECUTION

3.01 Concrete Removal

- A. Remove loose or delaminated concrete.
- B. Undercut all exposed reinforcing by removing concrete from the full circumference of the steel. The clearance between the concrete substrate and reinforcing steel shall be $\frac{3}{4}$ inch (19 mm) or $\frac{1}{4}$ inch (6 mm) larger than the top size aggregate in the repair material, whichever is greater.
- C. Concrete removal shall continue along the reinforcing steel until there are no visible signs of corrosion.

3.02 Cleaning and Repair of Reinforcing Steel

- A. Clean exposed reinforcing steel of rust, mortar, etc. to provide sufficient electrical connection and mechanical bond.
- B. If significant reduction in the cross section of the reinforcing steel has occurred, replace or install supplemental reinforcement as directed by the engineer.
- C. Secure loose reinforcing steel by tying tightly to other bars with steel tie wire.

3.03 Edge and Surface Conditioning of Concrete

- A. Concrete patches shall be square or rectangular in shape with squared corners.
- B. Sawcut the patch boundary $\frac{1}{2}$ inch (13 mm) deep or less if required to avoid cutting reinforcing steel.
- C. Create a clean, sound substrate by removing bond-inhibiting materials from the concrete substrate by high pressure water blasting or abrasive blasting.

3.04 Galvanic Anode Installation

- A. Galvanic anodes shall be installed along the perimeter of the repair or interface at spacing as specified on the drawings. In no case shall the distance between anodes exceed 30 inches (750 mm).
- B. Provide sufficient clearance between anodes and substrate to allow repair material to encase anode.
- C. Secure the galvanic anodes as close as possible to the patch edge using the anode tie wires. The tie wires should be tightened to allow little or no free movement.
 - 1. If the anode is to be tied onto a single bar, or if less than 1 inch (25 mm) of concrete cover is expected, place anode beneath the bar and secure to clean reinforcing steel.
 - 2. If sufficient concrete cover exists, the anode may be placed at the intersection between two bars and secured to each clean bar.
- D. Electrical Continuity
 - 1. Confirm electrical connection between anode tie wire and reinforcing steel by measuring DC resistance (ohm, Ω) with a multi-meter.
 - 2. Confirm electrical continuity of the exposed reinforcing steel within the repair area. If necessary, electrical continuity shall be established with steel tie wire.
 - 3. Electrical continuity is acceptable if the DC resistance measured with multi-meter is less than 5 Ω .

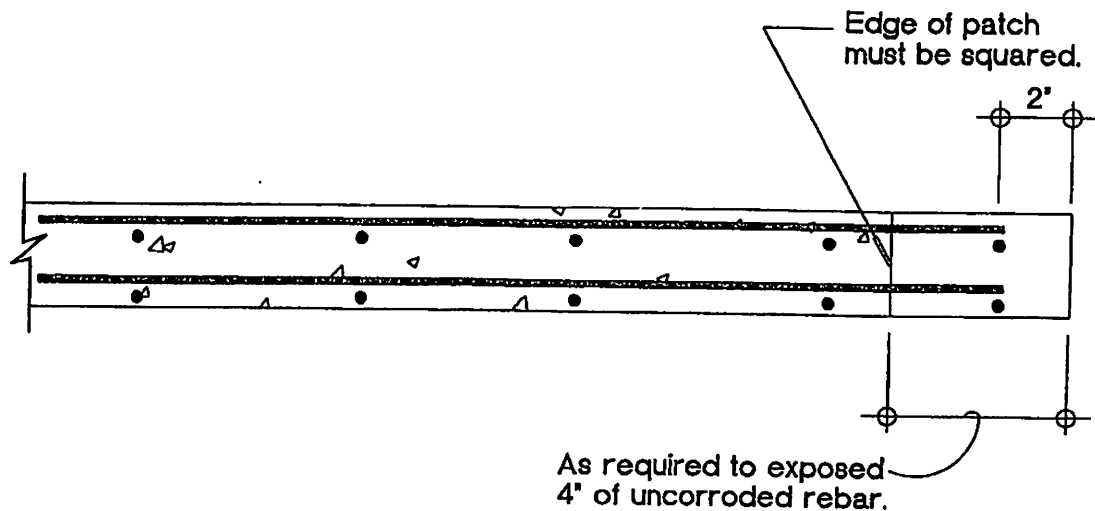
3.05 Concrete Replacement

- A. Repair material shall have a resistivity below 15,000 ohm-cm. Products with significant polymer modification and/or silica fume content may not be suitable. Similarly, if bonding agents are used, they shall have suitable conductivity. Insulating materials such as epoxy bonding agents shall not be used.**
- B. Complete the repair following normal concrete repair procedures, taking care not to create any air voids around the embedded galvanic anode.**

END OF SECTION

DETAILED

**D
R
A
W
I
N
G
S**



REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original "white metal" condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Bonding agent shall be as described in the specifications.
8. Cure and finish as required in the specifications.

Spalled Edge Repair Detail

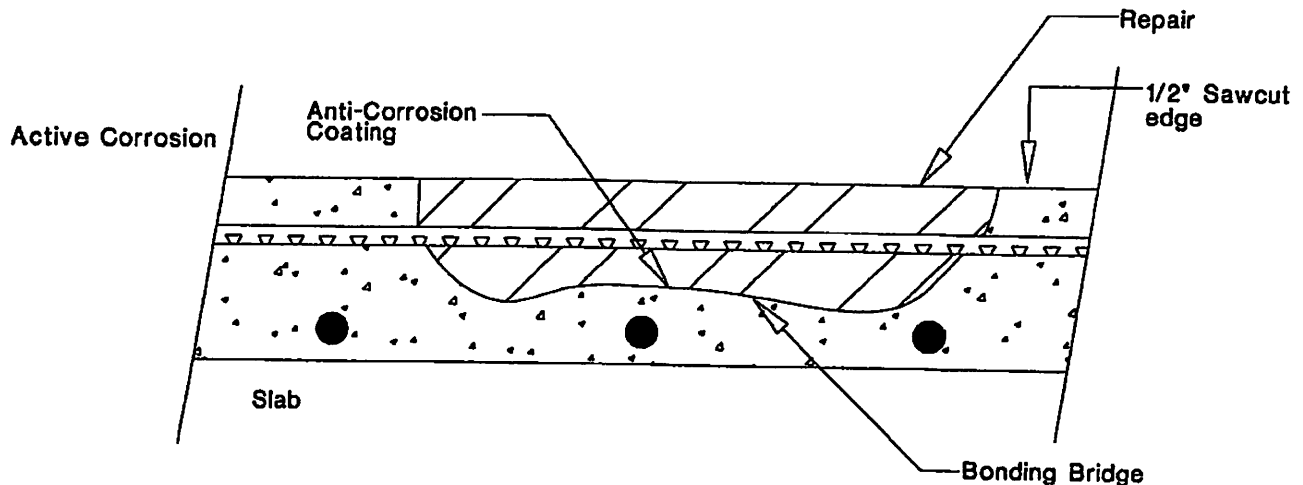


A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408

Deck Spalls



REPAIR PROCEDURES:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 6 inches of uncorroded rebar is observed.
4. Sandblast the concrete and expose the rebar. All scale shall be removed from rebar, restoring bars to their original 'white metal' condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Bonding agent shall be as described in the specifications.
8. Cure and finish as required in the specifications.

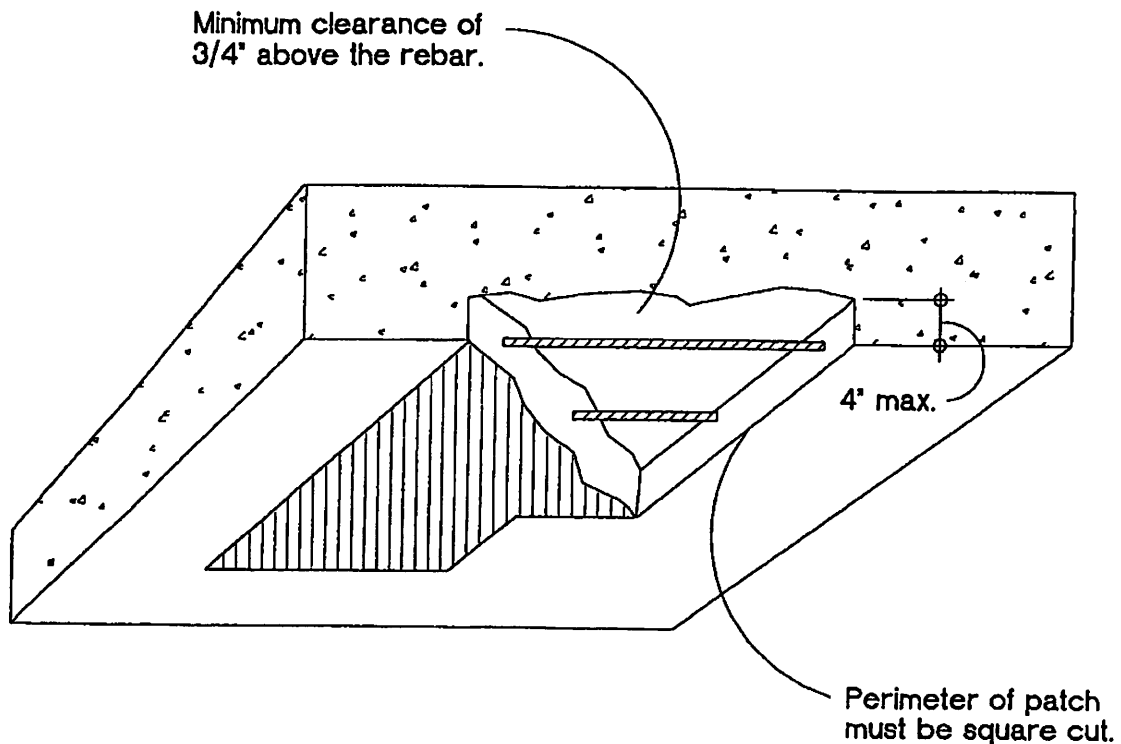
FLOOR SPALL REPAIR DETAIL



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original "white metal" condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Cure and finish as required in the specifications.

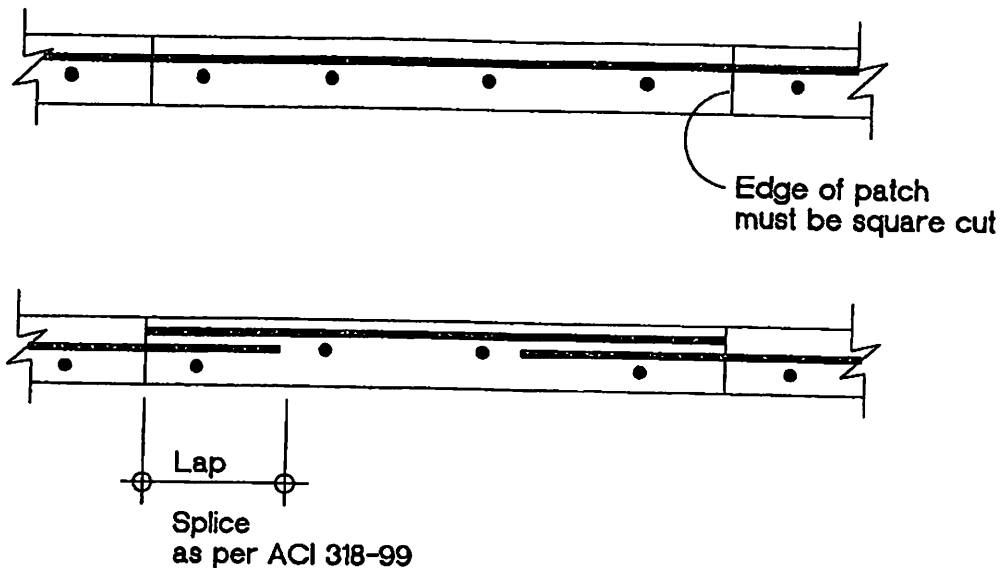
Ceiling Spall Repair Detail



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



FOR REBAR DETERIORATED > 15%

REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original 'white metal' condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Coat existing concrete with bonding agent as specified just prior to placing the mortar.
7. Repair mortar shall be as described in the specifications.
8. Cure and finish as required in the specifications.

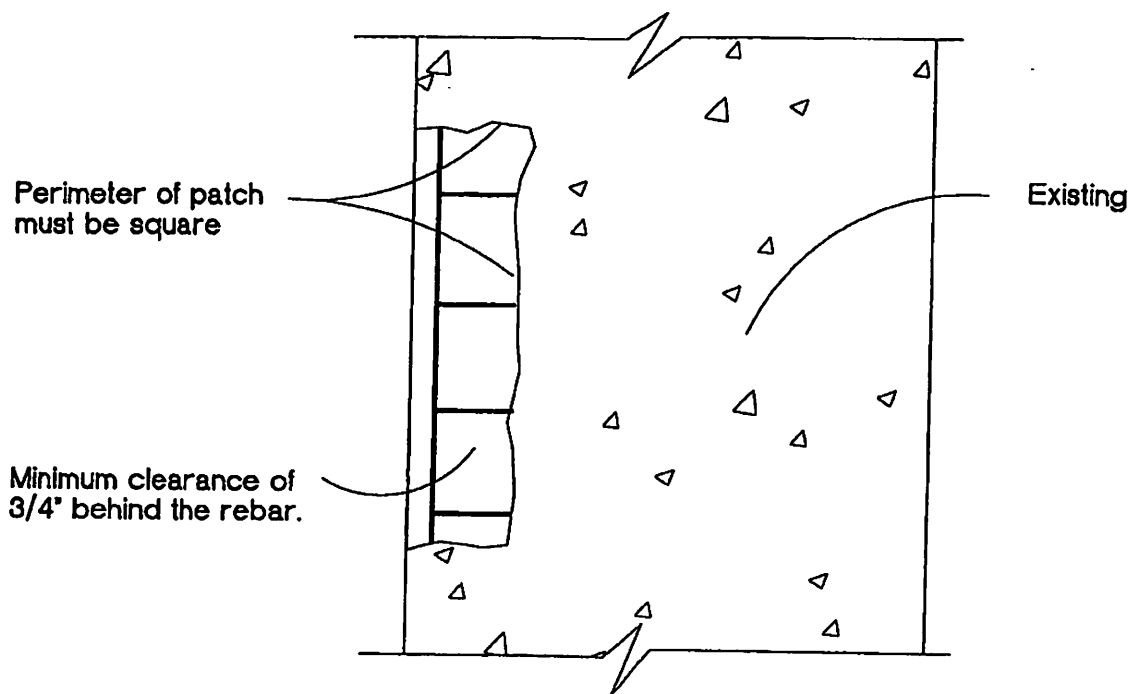
Full Depth Slab Repair



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original 'white metal' condition. Insert new bars of equal diameter next to those that have deteriorated by more than 20%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Cure and finish as required in the specifications.

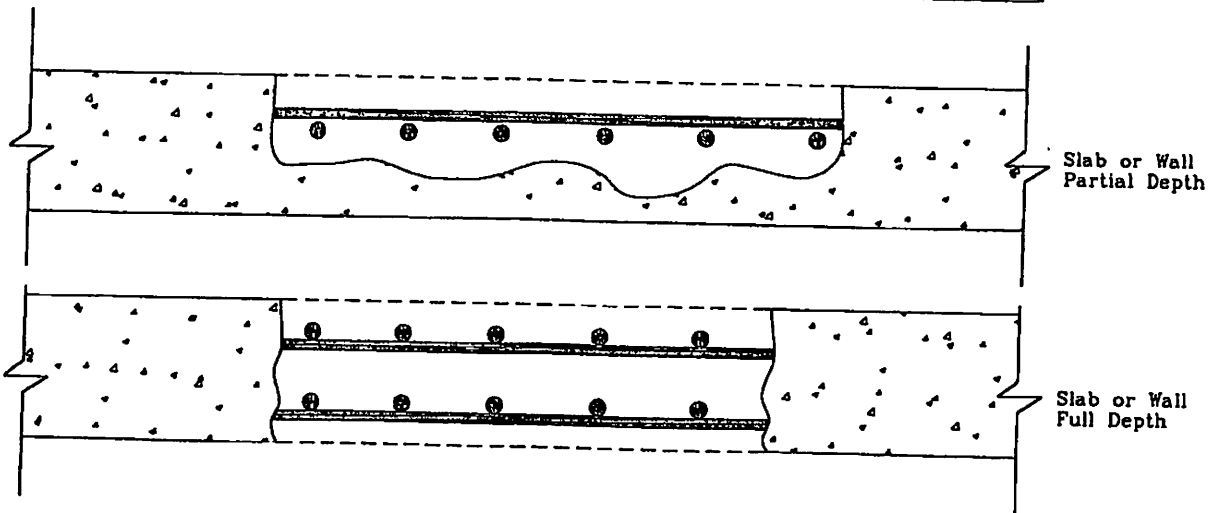
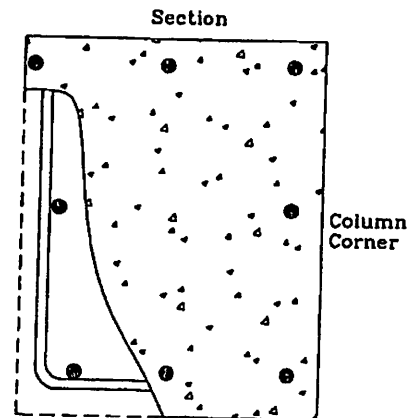
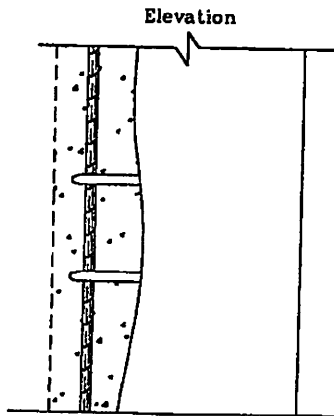
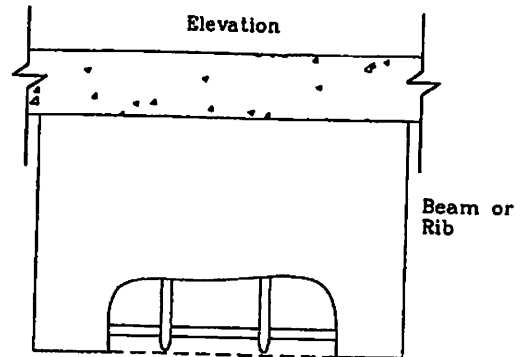
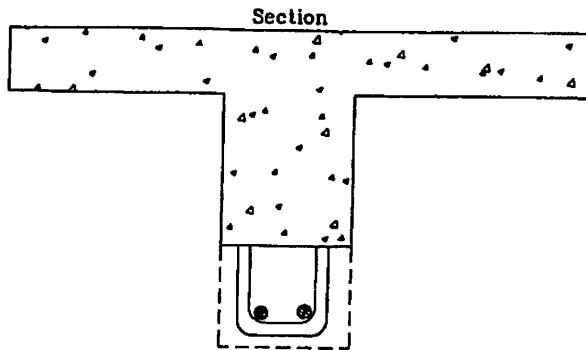
Column Spall Repair Detail



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408

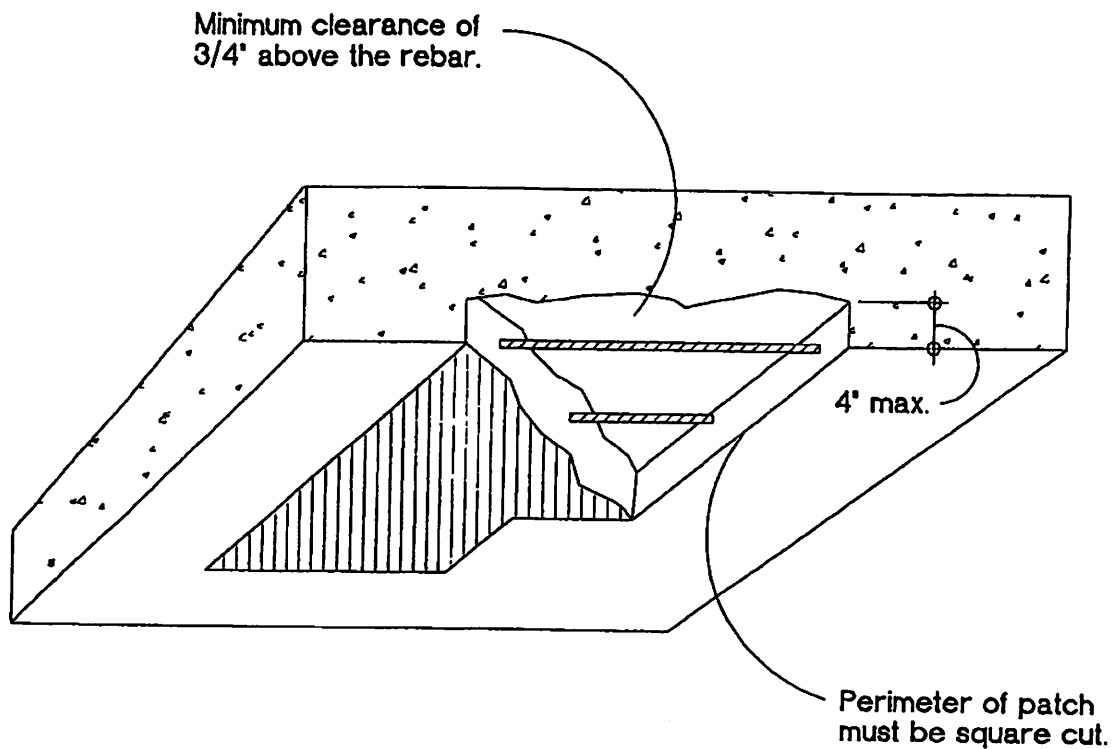


REMOVAL GEOMETRY

Caution! Before starting removals, review effect of Removals on structural integrity. Provide shoring of Member as necessary. Particular care shall be exercised at slab/beam connections to column.



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES
(561) 881-7280
300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original "white metal" condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Cure and finish as required in the specifications.

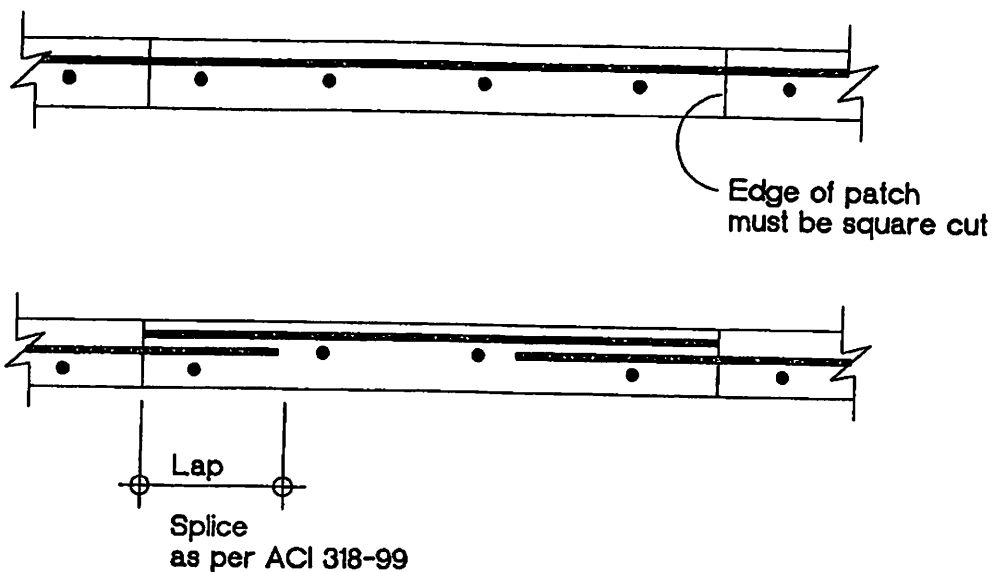
Ceiling Spall Repair Detail



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



FOR REBAR DETERIORATED > 15%

REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original "white metal" condition. Insert new bars of equal diameter next to those that have deteriorated by more than 25%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Coat existing concrete with bonding agent as specified just prior to placing the mortar.
7. Repair mortar shall be as described in the specifications.
8. Cure and finish as required in the specifications.

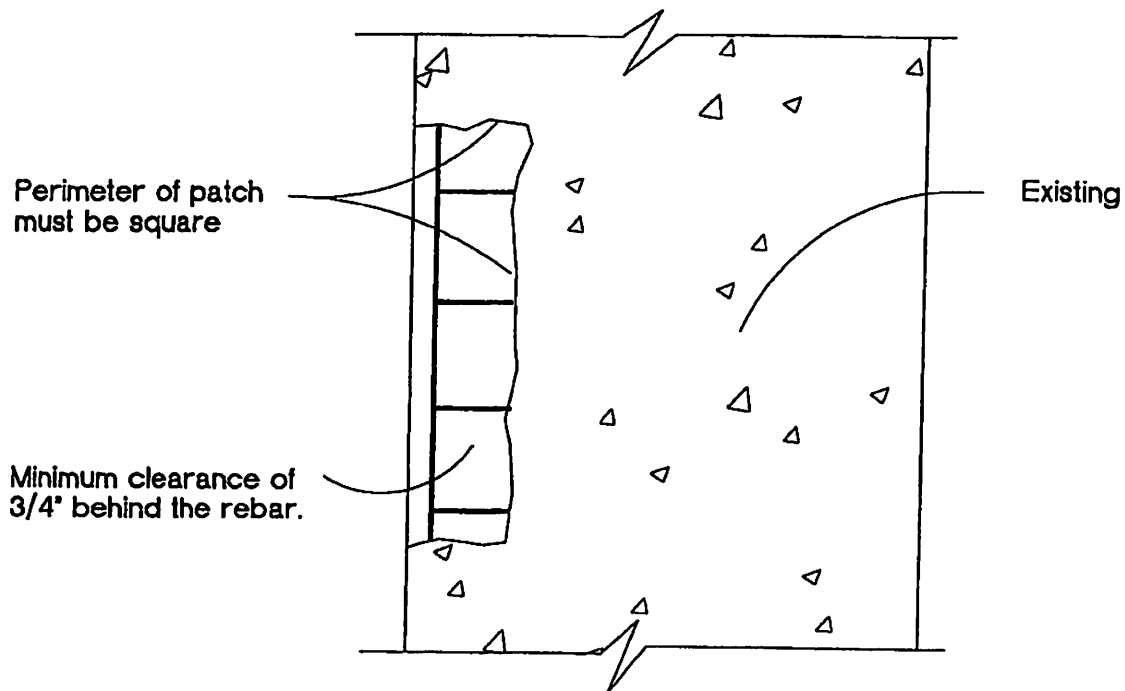
Full Depth Slab Repair



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



REPAIR PROCEDURE:

1. Remove all damaged or unsound concrete.
2. Saw cut the perimeter of the repair area, a minimum of 1/2 inch deep all around, forming a shoulder perpendicular to the substrate.
3. Chip out the concrete to expose the entire circumference of the rebar. Removal shall continue along the length of the reinforcing steel until at least 4 inches of uncorroded rebar is observed.
4. Sandblast the concrete and exposed rebar. All scale shall be removed from rebar, restoring bars to their original 'white metal' condition. Insert new bars of equal diameter next to those that have deteriorated by more than 20%. All new steel shall be ASTM A-615 Grade 60. Lap splices shall be in accordance with ACI 318-99.
5. Coat all new and existing rebar as specified.
6. Repair mortar shall be as described in the specifications.
7. Cure and finish as required in the specifications.

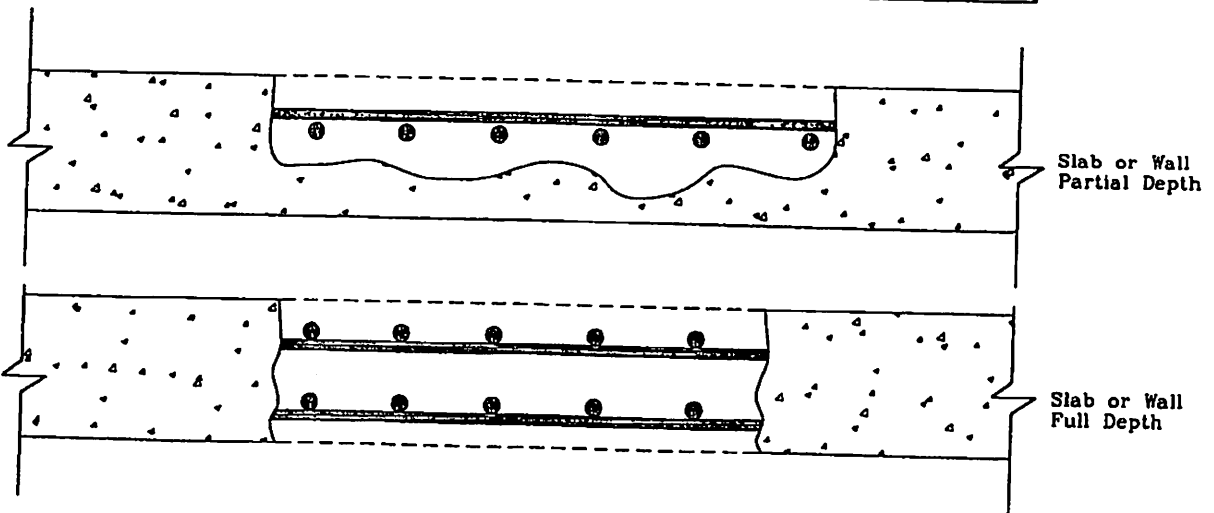
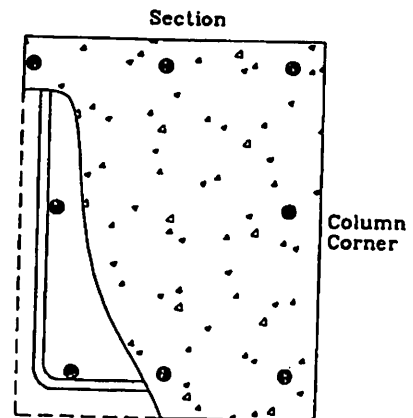
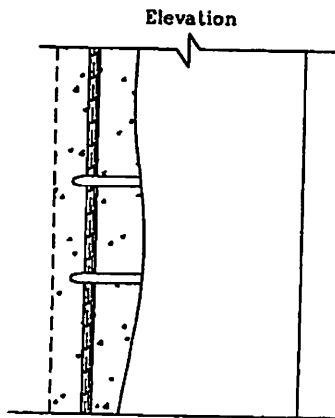
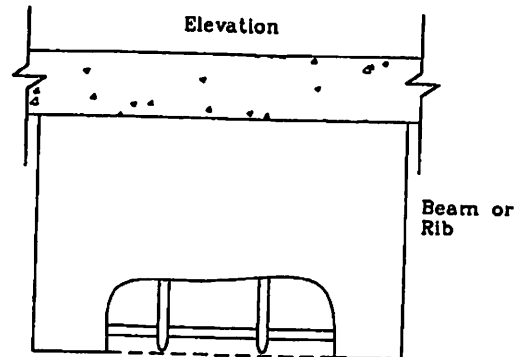
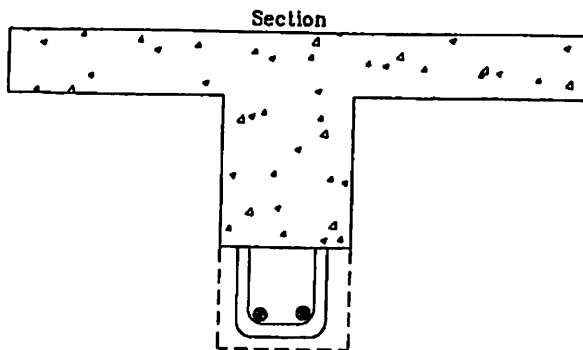
Column Spall Repair Detail



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



REMOVAL GEOMETRY

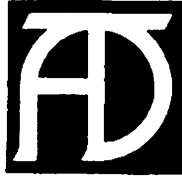
Caution! Before starting removals, review effect of Removals on structural integrity. Provide shoring of Member as necessary. Particular care shall be exercised at slab/beam connections to column.



A. T. DESIGNS, INC.
ENGINEERING & CONSULTING SERVICES

(561) 881-7280

300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408



*OK 3/20/02
To Job File*

**CHAMPLAIN TOWERS SOUTH
CONDOMINIUM ASSOCIATION, INC.
CONCRETE RESTORATION
PROJECT MANUAL**

Lot 0-0 Blk 4

NB2A

March 2002

**PREPARED BY:
Timothy S. Marshall, PE
300 Prosperity Farms Road, Suite G
North Palm Beach, FL 33408
Phone: (561) 881-7280
Fax: (561) 881-0201
e-mail: atd@atdesigns.net**

*Tim Marshall
3/20/02*

A. T. DESIGNS, INC.