BLOCK 1170 LOT 18 QUALIFICATION CODE _____ ADDRESS (SITE) 425 Jack Martin Blvd PERMIT NO. 18-0963

CONSTRUCTION PERMIT APPLICATION

C18-000897

Application Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: OMC 425 JACK MARTIN BLVD
2. Name of Owner in Fee: Meridian Health Tel. (732) 536 3296
   Address NEPTUNE (street) (municipality) NJ (zip code)
3. Ownership in Fee: Public _____ Private X
4. Principal Contractor: Supreme Conditioning Tel. (732) 739-9015
   Address 120 FRANCIS ST KEYPORT NJ
   License No. OR, if new home, Builder Reg. No. 19HC 00170900 Exp. Date 6/18
   Federal Employee No. 22-249-4501 FAX: (732) 739-9850
5. Architect or Engineer N/A Tel. (____) _____
   Address _____
6. Responsible Person in Charge of Work John Sisto
   Tel. (732) 739-9015 FAX (732) 739 9850

Replace Cooling Tower

V. FEE SUMMARY (for office use only)

			Update	Update
1.	Building	$	250	
2.	Electrical		150	
3.	Plumbing		150	
4.	Fire Protection			
5.	Elevator Devices			
6.	Subtotal	$		
7.	Less 20% for State Plan Review			
8.	Subtotal	$		
9.	DCA Training Fee		1.91	
10.	Subtotal			
11.	Cert. of Occupancy			
12.	Other			
13.	TOTAL	$	551.91	

VI. BUILDING/SITE CHARACTERISTICS

1. Number of Stories _____
2. Height of Structure _____ ft.
3. Area — Largest Floor _____ sq. ft.
4. New Building Area _____ sq. ft.
5. Volume of New Structure _____ cu. ft.
6. Construction Classification _____
7. Total Land Area Disturbed _____ sq. ft.
8. Flood Hazard Zone _____
9. Base Flood Elevation _____ ft.
10. Wetlands yes _____ no _____
11. Max. Live Load _____
12. Max. Occupancy Load _____

COMMERCIAL

II. PROPOSED WORK

		Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Resubmission Dates Rejection	Re-viewer
1.	☐ Minor Work	50000	MFF	3/6/18						
2.	☐ New Building									
3.	☐ Addition					04/10/18	MFF			
4.	☒ Alteration									
5.	☐ Fire Protection					3/13/18				
6.	☒ Plumbing	4500				3/13/18	PJ			
7.	☒ Electrical	500								
8.	☐ Elevator Devices									
9.	☐ Asbestos Abat. Subch. 8									
10.	☐ Lead Hazard Abatement									
11.	☐ Demolition									
	TOTAL COSTS	50000								

OPTIONAL (for office use only)

III. DO YOU WANT: (optional)

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL
1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No. of dwelling units:
Before Construction _____
After Construction _____
Net Gain or Loss _____

B. NON-RESIDENTIAL
1. State Specific Use:
2. Use Group:
3. Change in Use Group, Indicate Former:

Brick Township
401 Chambersbridge Rd
Brick, NJ 08723

Date Issued 7/13/2018
Control Number C-18-000897
Permit Number 18-0963
Permit Issue Date 4/12/2018
Certificate Number 18-0963

Certificate

Construction Code Division

(Certificate of Approval)

Identification

Work Site Location: 425 JACK MARTIN BLVD. Brick Township, NJ Block: 1170 Lot: 18 Qual:

Owner in Fee: OCEAN MEDICAL CENTER %MERIDIAN

Owner Address: 1350 CAMPUS PKWY STE 1500 NEPTUNE NJ 07753

Telephone:

Contractor SUPREME CONDITIONING INC

Address 120 FRANCIS STREET KEYPORT NJ 07735

Telephone: (732) 739-9015 Fax:

License Number or Builders Registration Number: Federal Emp. Number:

Home Warranty Number:

Type of Warranty Plan: ☐ State ☐ Private

Use Group: I-2 Construction Classification:

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: ALTERATION - COMMERCIAL - ...REPLACEMENT OF EXIST'G COOLING TOWER

Certificate Comments:

☐ **Certificate of Occupancy**
This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☑ **Certificate of Approval**
This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ **Certificate of Continued Occupancy**
This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **Temporary Certificate of Compliance**
The following conditions must be met no later than
or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:
Conditions to be met:

☐ **Certificate of Clearance - Lead Abatement 5:17**
This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

☐ Total removal of lead-based paint hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Clearance - Asbestos Abatement**
This serves notice that based on written certification, asbestos abatement was performed to the following extent.

☐ Total removal of asbestos hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Compliance**
This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

☐ **Temporary Certificate of Occupancy**
The following conditions must be met no later than:
or the owner will be subject to fine or order to vacate:
This certificate has an expiration date of:
Conditions to be met:

Construction Official

Fee: $0.00
Check Number:
Collected By:

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

A. ( ) I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

B. ( ) I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A., or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

C. ( ) I further certify that I will perform or supervise the following work:
C.1. ( ) Building C.2. ( ) Fire Protection

I further certify that I will perform the following work:
C.3. ( ) Electrical C.4. ( ) Plumbing

D. ( ) I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature_____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

✓ Check if contractor.

Agent Name Supreme Conditioning Inc

Address 120 Francis St

Key Port NJ

Telephone (732) 239-9015

Signature _____

III. ( ) LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

ELECTRICAL SUBCODE
TECHNICAL SECTION

Date Received / Control # 4/12/18

Date Issued / Permit # 18-0963

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1170 Lot 18 Qualification Code

Work Site Location OceaN Medical Center

425 Jack Martin Blvd, Brick NJ

Owner in Fee: OM.C

Tel. (732) 836-3296 e-mail

Address Neptune, NJ. (street / municipality / zip code)

Contractor: Electrical Installation & Construction, LLC Tel. (732) 415-4020

Address 2275 West County Line Rd. Ste. 6-166 e-mail info@eicllc.net

Jackson, NJ 08527

Contractor License No. 16242 Exp. Date 3/2018

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): 13VH04728200

Federal Emp. ID No. 22-3978735 FAX: (732) 415-3790

B. ELECTRICAL CHARACTERISTICS

Use Group Present Proposed

[ ] Pole/Pad # [ ] Temporary [ ] Other

Building Occupied as Utility Co.

Est. Cost of Elec. Work $ 5000

JOB SUMMARY (Office Use Only)

PLAN REVIEW

[ ] No Plans Required

[ ] Partial -Underslab Utilities Approved

Date: Approved by:

[✓] Electric Plans Approved

Date: 3/13/18 Approved by: PSE

Joint Plan Review Required:

[ ] Bldg. [ ] Plumb. [ ] Fire. [ ] Elev.

SUBCODE APPROVAL for PERMIT

Date: 3/13/18

Approved by: PSE

SUBCODE APPROVAL for CERTIFICATE

[ ] CO [ ] CCO [✓] CA

Date: 6/27/18

Approved by:

INSPECTIONS Type:	Failure	Failure	Approval	Initial
Rough				
Barrier-Free				
Trench				
Temp. Serv.				
Constr. Serv.				
TCO				
Other				
Service				
Final			6-26-18	
Barrier-Free				

Dates (Month/Day)

Temp. Cut-in Card Date Issued

Final Cut-in Card Date Issued

Annual Pool Inspection

Date of Grounding and Bonding Certification

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant's Signature/Contractor's Seal and Signature

[✓] Licensed Elec. Contractor [ ] Certified Landscape Irrigation Contractor [ ] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

Replace Cooling Tower

COMMERCIAL

QTY.	SIZE	ITEMS	FEE (Office Use Only)
		Lighting Fixtures	
		Receptacles	
		Switches	
		Detectors	
		Light Poles	
		Motors—Fract. HP	
		Emergency & Exit Lights	
		Communications Points	
		Alarm Devices/F.A.C. Panel	
		TOTAL NUMBERS	$
		Pool Permit/with UW Lights	
		Storable Pool/Spa/Hot Tub	
		KW Elec. Range/Receptacle	
		KW Oven/Surface Unit	
		KW Elec. Water Heater	
		KW Elec. Dryer/Receptacle	
		KW Dishwasher	
		HP Garbage Disposal	
		KW Central A/C Unit	
		HP/KW Space Heater/Air Handler	
		KW Baseboard Heat	
2	40	HP Motors 1/+ HP	
		KW Transformer/Generator	
		AMP Service	
		AMP Subpanels	
		AMP Motor Control Center	
		KW Elec. Sign/Outline Light	

Administrative Surcharge $

Minimum Fee $

State Permit Surcharge Fee $

TOTAL FEE $

U.C.C. F120 (rev. 12/07) Internet version

Applicant: When submitting this form to your Local Construction Code Enforcement Office, please provide one original plus three photocopies.

BUILDING SUBCODE TECHNICAL SECTION

Date Received
Date Issued
Control #
Permit #

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1170 Lot 18
Work Site Location OMC 425 JACK MARTIN Blvd
Brick Town NJ
Owner in Fee MERIDIA — HEALTH
Address NEPTUNE NJ

Tele. (732) 836-3296
Contractor SUPREME Conditioning Inc
Address 120 FRANCIS ST
KEYPORT NJ 07735
Tele. (732) 739-9015 Fax (732) 739-9850
Lic. No. or Bldrs. Reg. No. 19HC00170980
Federal Emp. No. 22-249-4501

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

Signature

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

REPLACE old Cooling Tower With NEW Cooling. REPIPE WATER LINES

COMMERCIAL

JOB SUMMARY (Office Use Only)

PLAN REVIEW	Date	Initial
[ ] No Plans Required		
[✓] All	04/10/18	KAK
[ ] Footing		
[ ] Foundation		
[ ] Frame		
[ ] Other Subcode	Appl	

Last Plan Review Received: 04/10/18 (Call)

[ ] Elec. [ ] Plumb. [ ] Fire [ ] Elevator

SUBCODE APPROVAL

[ ] CO [ ] CCO [ ] CA

Date: 06/26/18
Approved by: KAK.

INSPECTIONS Type:	Failure	Failure	Approval	Initial
	Dates (Month/Day)			
Footing				
Foundation				
Slab				
Frame				
Barrier-Free				
Insulation				
Finishes				
Energy				
Mechanical				
TCO				
Other				
Final			06/26/18	KAK
Barrier-Free				

By Loading docks

TYPE OF WORK:

- [ ] New Building
- [ ] Addition
- [ ] Alteration
  - [ ] Roofing
  - [ ] Siding
  - [ ] Fence _____ Height (exceeds 6')
  - [ ] Sign _____ Sq. Ft.
  - [ ] Pool
  - [ ] Asbestos Abatement Subchapter 8
  - [ ] Lead Haz. Abatement NJAC 5:17
  - [X] Other NEW Cooling Tower
- [ ] Demolition

FEE (Office Use Only)

$ _____

Administrative Surcharge	$
Minimum Fee	$
DCA Training Fee	$
TOTAL FEE	$

B. BUILDING CHARACTERISTICS

	Present	Proposed
Use Group		
Constr. Class		

No. of Stories
Height of Structure _____ Ft.
Area — Largest Floor _____ Sq. Ft.
New Bldg. Area/All Floors _____ Sq. Ft.
Volume of New Structure _____ Cu. Ft.
Total Land Area Disturbed _____ Sq. Ft.

Est. Cost of Bldg. Work:

1. New Bldg. $
2. Alteration $
3. Total (1+2) $ 50000

U.C.C. F110
(rev. 3/06)

PLUMBING SUBCODE TECHNICAL SECTION

Date Received 4/12/18
Date Issued
Control #
Permit # 18-0963

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1170 Lot 18
Work Site Location OMC 425 JACK MARTIN BLVD BRICK NJ
Owner in Fee MERIDIA - HEALTH
Address NEPTUNE NJ
Tele. 732-836-3296
Contractor SUPREME CONDITIONING INC
Address 126 FRANCIS ST KEYPORT NJ
Tele. 732-739-9015 Fax 732-739-9850
Lic. No. 19HC00170900
Federal Emp. No. 22-249-4501

B. PLUMBING CHARACTERISTICS

Use Group Present Proposed
Building Sewer Size Public Sewer Private Septic
Water Service Size Public Water Private Well
Est. Cost of Plumbing Work $ 45000

JOB SUMMARY (Office Use Only)

PLAN REVIEW
[ ] No Plans Required
Joint Plan Review Required:
[ ] Building [ ] Electric
[ ] Fire [ ] Elevator
[ ] Plumbing Plans Approved
Date: 5-10-18
Approved by:

SUBCODE APPROVAL
[ ] CO [ ] CCO [ ] CA
Date: 7-9-18
Approved by:

INSPECTIONS Type:	Failure	Failure	Approval	Initial
		Dates (Month/Day)		
Slab				
Rough				
Water				
Sewer				
Fixtures				
Gas Equipment				
Gas Piping				
Solar				
TCO				
Conditional FINAL			6-26-18	
FINAL			7-9-18	

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Signature — Contractor's Seal

[ ] Licensed Plumbing Contractor [ ] Exempt Applicant

FINAL Pending RPZ Test Report

D. TECHNICAL SITE DATA (List of all fixtures.)

NO.	FIXTURE/EQUIPMENT	FEE (Office Use Only)
	Water Closet	$
	Urinal/Bidet	
	Bath Tub	
	Lavatory	
	Shower	
	Floor Drain	
	Sink	
	Dishwasher	
	Drinking Fountain	
	Washing Machine	
	Hose Bibb	
	Water Heater	
	Fuel Oil Piping	
	Gas Piping	
	Steam Boiler	
	Hot Water Boiler	
	Sewer Pump	
	Interceptor/Separator	
	Backflow Preventer	
	Greasetrap	
	Sewer Connection	
	Water Service Connection	
	Stacks	
1	Other REPLACE Cooling Tower	
	Other	
	Other	

COMMERCIAL

Administrative Surcharge	$	
Minimum Fee	$	
DCA Training Fee	$	
TOTAL FEE	$	

U.C.C. P130
(rev. 3/98)

NJ Permits, Inc.

18-0963 11/20/18

QPGTMR 09/13

Physical Connection Permit No.: _____-WPC_____

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Quarterly Physical Connection Test & Maintenance Report

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
☑	☐	☐	☐
01/01-03/31	04/01-06/30	07/01-09/30	10/01-12/31

Instructions: This form is to be completed for each test of each approved valve. It is to be mailed to the Supplier of Water and Local Administrative Authority within 5 days of each test and inspection performed by a Certified Tester. These forms shall be kept at the facility for a period of 5 years (N.J.A.C. 7:10-10.2(f)) and be exhibited upon request.

Date of test 1 / 8 / 18

To:
OCEAN MEDICAL CENTER
425 JACK MARTIN BLVD.
BRICK, NJ 08742

From: (Name of Permit Holder)

The backflow prevention device identified below has been tested and inspected as required by N.J.A.C. 7:10-10.6 and is certified to be in compliance with this regulation.

Description of Valve

Manufacturer: WILKONS ☑RPZ ☐DCVA
Model Number: 975XL Size: 2 in.
Serial Number: W030787
Comments and Notations: _____

Location of Valve

BOILER ROOM
COOLING TOWER REFILL

Test Kit Serial # _____ Calibration Date _____	PRESSURE TEST REDUCED PRESSURE ZONE ASSEMBLY DOUBLE CHECK VALVE			INTERNAL INSPECTION DOUBLE CHECK VALVE ASSEMBLY	
	1st Check	2nd Check	Relief Valve	1st Check	2nd Check
Initial Test Passed ☑ Failed ☐	Closed Tight ☑ at 8.0 psid Leaked ☐	Closed Tight ☐ at _____ psid Leaked ☐	Opened at 2.2 psid	OK ☐	OK ☐
	No. 2 Shut-off Valve Closed Tight ☑ Leaked ☐ By-pass Used ☐		Did Not Open ☐	Failed ☐	Failed ☐
Repairs & Materials Used					
Test After Repair & Assembly	Closed Tight ☐ _____ psid	Closed Tight ☐ _____ psid	Opened at _____ psid	OK ☐	OK ☐

The Results Shown Above are Certified to be True

Certified Testers Name: MICHAEL CASEY
Certified Testers Signature: _____
Certifying Authority: PLUMBERS&PIPEFITTERS LU #9
Cert. ID #: LU9-202 Exp. Date: 7 /12 /2020
Tester Phone No: 732-991-1704

Witnesses to test and inspection

Name: _____ Title: _____
Representing: _____
Name: _____ Title: _____
Representing: _____

QPCTMR 09/13

Physical Connection Permit No.: _____-WPC_____

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Quarterly Physical Connection Test & Maintenance Report

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
☐	☑	☐	☐
01/01-03/31	04/01-06/30	07/01-09/30	10/01-12/31

Instructions: This form is to be completed for each test of each approved valve. It is to be mailed to the Supplier of Water and Local Administrative Authority within 5 days of each test and inspection performed by a Certified Tester. These forms shall be kept at the facility for a period of 5 years (N.J.A.C. 7:10-10.2(f)) and be exhibited upon request.

Date of test 9/13/18

To:
OCEAN MEDICAL CENTER
425 JACK MARTIN BLVD.
BRICK, NJ 08742

From: (Name of Permit Holder)

The backflow prevention device identified below has been tested and inspected as required by N.J.A.C. 7:10-10.6 and is certified to be in compliance with this regulation.

Description of Valve

Manufacturer: WILKONS ☑RPZ ☐DCVA
Model Number: 975XL Size: 2 in.
Serial Number: W030787
Comments and Notations: _____

Location of Valve

BOILER ROOM
COOLING TOWER REFILL

Test Kit Serial # _____ Calibration Date _____	PRESSURE TEST REDUCED PRESSURE ZONE ASSEMBLY DOUBLE CHECK VALVE 1st Check	2nd Check	Relief Valve	INTERNAL INSPECTION DOUBLE CHECK VALVE ASSEMBLY 1st Check	2nd Check
Initial Test Passed ☑ Failed ☐	Closed Tight ☑ at 8.2 psid Leaked ☐ No. 2 Shut-off Valve Closed Tight ☑ Leaked ☐ By-pass Used ☐	Closed Tight ☐ at _____ psid Leaked ☐	Opened at 2.4 psid Did Not Open ☐	OK ☐ Failed ☐	OK ☐ Failed ☐
Repairs & Materials Used					
Test After Repair & Assembly	Closed Tight ☐ _____ psid	Closed Tight ☐ _____ psid	Opened at _____ psid	OK ☐	OK ☐

The Results Shown Above are Certified to be True

Certified Testers Name: MICHAEL CASEY
Certified Testers Signature: _____
Certifying Authority: PLUMBERS&PIPEFITTERS LU #9
Cert. ID #: LU9-202 Exp. Date: 7/12/2020
Tester Phone No: 732-991-1704

Witnesses to test and inspection

Name: _____ Title: _____
Representing: _____
Name: _____ Title: _____
Representing: _____

ATT,

Mr. Joseph DiRosa

Please find enclosed the 1st. & 2nd. qtr. Physical Connection Testing. This is for the Cooling Tower Refill at Ocean Medical Center 425 Jack Martian Blvd. If you have any further questions please contact me, at 732-840-3296.

Thank you,

Richard W. McCann Sr.

Plant Supervisor

CONSTRUCTION PERMIT

Date Issued 4/12/18
Control # C-18-000897
Permit # 18-0463

IDENTIFICATION Block: 1170 Lot: 18 Qualifier

Work Site Location: 425 JACK MARTIN BLVD. Brick Township, NJ

Owner in Fee: OCEAN MEDICAL CENTER %MERIDIAN 1350 CAMPUS PKWY STE 1500 NEPTUNE NJ 07753

Telephone:

Contractor: SUPREME CONDITIONING INC

Address: 120 FRANCIS STREET KEYPORT NJ 07735

Telephone: (732) 739-9015

Lic. No. or Bldrs. Reg. No.: 19HC00170900 19HC00170900

Federal Employee. No.: 19HC00170900

Is hereby granted permission to perform the following work:

- [x] BUILDING
- [x] PLUMBING
- [ ] LEAD HAZARD ABATEMENT
- [x] ELECTRICAL
- [ ] FIRE PROTECTION
- [ ] DEMOLITION
- [ ] ELEVATOR DEVICES
- [ ] ASBESTOS ABATEMENT (Subchapter 8 only)
- [ ] OTHER

DESCRIPTION OF WORK:

ALTERATION - COMMERCIAL ...REPLACEMENT OF EXIST'G COOLING TOWER

PAYMENTS (Office Use Only)

Building	$2,500
Electrical	$150
Plumbing	$150
Fire Protection	$0
Elevator Devices	$0
Other	$0.00
DCA Training Fee	$191
CO Fee	
Other	$0
Total	$2,991
Check No.	16082
Cash	$0
Credit	$0
Collected By	M. Fagin

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work $100,000

D. Newman Jr PP — Construction Official

4/10/18 — Date

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR 2 CANARY - OFFICE **3 PINK - TAX ASSESSOR** 4 GOLD - APPLICANT

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

- [ ] Required inspections for all subcodes for one- and two-family dwellings are as follows:
  1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
  2. Foundations and all walls up to grade level prior to back filling.
  3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
  4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

  Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

- [ ] Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

- [x] A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

- [x] A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.

SPX®
COOLING TECHNOLOGIES

Dyna-Tech Sales Corporation
55 Columbia Road
Branchburg, NJ 08876
(908) 541-1010 X226 / fax: (908) 541-1011
email: estrelko@dynatechsales.net

Submittal to:
Supreme Conditioning Systems
206
Hazlet, NJ 07730

Project:
Ocean Medical Center
Brick, NJ

Engineer:

Opportunity / Quote No. (Ver): ERIC STRELKO_171009_082605294 / ERIC STRELKO_180116_151040731 (1)
Rep Quote No.: MT3330-17
Sales Order: 10152997 **Customer P.O.: MT3330-17**

February 19, 2018

TOWER MODEL	PERFORMANCE CONDITIONS	MOTOR DATA	TOWER DIMENSIONS	WEIGHTS
Quantity of (1) Marley NC Class model **NC8403TLS** factory assembled 2-Cell crossflow cooling tower	Per 2-cell tower: 3,000 gpm 95.0 °F Hot Water 85.0 °F Cold Water 77.2 °F Entering WB	NEMA 40 HP 1 speed / 1 wind 3 phase / 60 Hz / **230/460v** 1.15sf / TEFC 1800 RPM Premium Efficiency Inverter duty nameplated	Each cell: (without options) Length 8' - 4 3/4" Width 18' - 2" Height 16' - 5 1/4" Per 2-cell tower: (with options) Length 23' - 6 3/8" Width 18' - 2" Height 16' - 5 1/4"	Per cell: Shipping: 8,422 lb Operating: 16,827 lb Per 2-cell tower: Shipping: 16,843 lb Operating: 33,653 lb

Quantities shown below are per tower.

Base Tower Construction/Equipment:
Galvanized Steel casing.
Galvanized Steel structure.
Galvanized Steel collection basin.
Galvanized Steel distribution basin.
Custom anchorage design to fit customer's grillage at 135.00 in spacing.
Quiet fan with aluminum blades.
Marley designed Geareducer® with 5-year warranty.
PVC film fill with integral louvers and drift eliminators designed and manufactured by Marley.
Published sound data is independently verified by a CTI licensed test agency.
CTI certification per STD-201.
Fiberglass fan stack.

Collection Basin Connections and Accessories:
All flanges are to Class 125 ANSI B16.1 standard.
All threads are to American Standard Pipe Taper Thread.
(2) 8 in (203 mm) diameter bevel and groove cased face outlet(s) with trash screen(s).
Galvanized interconnecting flume(s) for water flow and equalization between cells
Interconnecting flume weir plate(s) for cell isolation
4 in (102 mm) diameter combination drain and overflow in each cell
(2) 1 in (25.4 mm) water make-up float valve(s)

Distribution Basin Inlet and Accessories:
(1) self-balancing 8 in (203 mm) diameter PVC side inlet connection per cell.
All internal piping is PVC. External piping is PVC.

Maintenance & Maintenance Access Features:
Tower is designed in accordance with OSHA safety standards.
This quotation includes features that will allow safe access on the fan deck while the fan is still operating.
External lube line with dipstick
Convenient access to the collection basin and plenum area is provided via a large access door located on each endwall
Easy fitting perimeter guardrail, kneerail & toeboard
(2) Cased face ladders
Ladder(s) extended 60 in below base of tower
Easy fitting ladder safety cage(s)
Self closing safety gate(s) included at the top of the access ladder(s)

Control Systems:
Danfoss NEMA 1 Indoor VFDs with bypass (one per cell, field installed) -- dV/dT filter may be required if VFD to motor run >150ft (not included)
(1) IMI 685A Mechanical, DPDT, manual reset vibration cutoff switch per cell

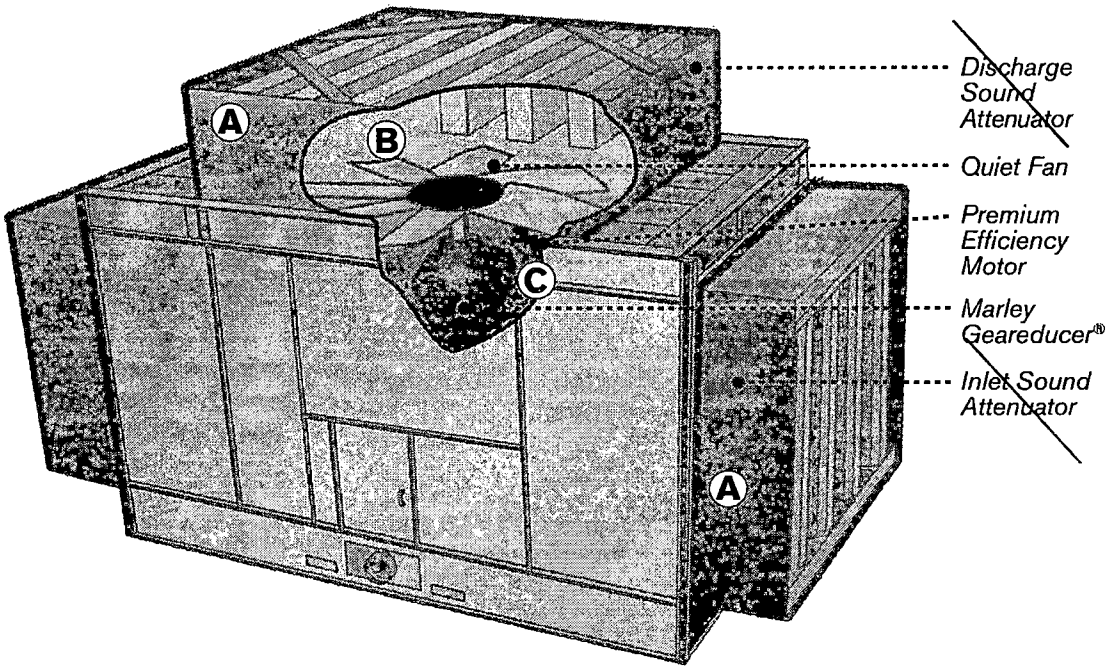
SPX®

MARLEY INSIGHT

NC sound solutions

Sound Solutions

Sometimes, being quiet is every bit as important as being cool. For applications where sound reduction is imperative, Marley® NC® cooling towers are equipped with a choice of best-in-class low sound options.



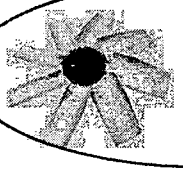
Ⓐ Sound Attenuators

Sound attenuator sections can be installed on both the discharge and inlet areas of cooling towers. For maximum noise reduction, two stages of attenuators can be installed as an option for the most stringent noise control.

Unlike others, Marley inlet attenuators have negligible effect on performance, however, discharge attenuators may necessitate an increase in tower size or fan power.

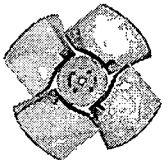
Ⓑ Fans

Fan noise is typically the largest noise contributor. By installing premium efficiency fans, sound levels can be lowered significantly.



Quiet Fan

Suitable for most noise-sensitive situations.



Ultra Quiet Fan

This fan can reduce sound levels even further with negligible performance reduction.

Ⓒ Drive and Motor

Marley Geareducers are engineered to be the quietest gear drive system available and are typically quieter than belt drives.

Marley Variable Speed Drives minimize a tower's sound level during periods of reduced load and/or reduced ambient temperature.

Marley Premium Efficiency Motors are optional on all models and perform to the highest level of reliability while maintaining optimum sound output.

Common Applications

- **Hospitals**
  Noise concerns may be paramount near medical facilities where quiet and rest are necessary.
- **Universities and Office Buildings**
  Whenever HVAC equipment is near people, unwanted noise may be a concern. For example, conducting a meeting or teaching a class in a room with cooling equipment outside can be an unwelcome distraction.
- **Hotels and Residential Areas**
  At night, ambient noise levels are lower, which may make a cooling tower seem louder to anyone nearby. Hotel guests or residential neighbors shouldn't have to contend with cooling equipment cycling on and off.

Have an Existing Cooling Tower that's Too Loud?

Most of these options can be retrofitted to existing Marley NC cooling towers back to year 2000 models with few modifications. Contact your local Marley sales representative to find out how.

The Marley "Quiet Package"

Marley Low-Sound fans are standard on all NC models ensuring quiet operation in our most economical configuration. The Marley "Quiet Package" includes the affordable Quiet Fan mechanical option, a combination of motor, gear ratio, fan blade count and blade profile optimized to achieve the lowest possible sound levels while maintaining efficiency at a reasonable cost.

For more severe cases requiring the lowest possible fan sound levels, the Marley "Ultra Quiet" fan option is now available on most NC models.

All of these options are CTI Certified for thermal performance.

Marley®

SPX COOLING TECHNOLOGIES, INC. | OVERLAND PARK, KS 66213
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spxcooling.com

CERTIFICATE OF INDEPENDENT SOUND VALIDATION

SPX® ★★★ ★★★ MARLEY®

SPX Cooling Technologies, Inc. | 7401 West 129 Street | Overland Park, KS 66213 | 913 664 7400 | spxcooling.com

MARLEY NC® 8400 COOLING TOWER

This document certifies that published sound data for the Marley NC8400 Cooling Tower line has been independently verified, and complies with CTI ATC-128, Test Code for Measurement of Sound for Water-Cooling Towers.

Sound testing was conducted on various Marley NC 8400 models and configurations by an independent CTI–licensed sound test agency using certified and calibrated Type 1 precision sound test instruments per the test standards. Sound pressure levels were recorded in the acoustic near-field and far-field locations as specified in the CTI ATC-128 test procedure for Sound Measurements on Small Towers. Testing and analysis was conducted by a certified Professional Engineer in Acoustical Engineering from SSA Acoustics, LLP.

SSA Acoustics, LLP is a CTI licensed sound test agency and industry leader in acoustical engineering. CTTAI and SSA Acoustics hold a joint CTI sound test agency license.

LICENSED CTI SOUND TESTING BY:

Erik Miller-Klein, P.E.
SSA Acoustics, LLP

Nick Stich
Cooling Tower Test Associates

NC_SOUNDCERT

UPDATE™ Version 5.6.6
Product Data: 9/28/2017 (Current)

10/3/2017 7:41:32 AM

Job Information

Selected By

Dyna-Tech Sales Corp
55 Columbia Road
Branchburg, NJ 08876
estrelko@dynatechsales.net

Eric Strelko
Tel 908-541-1010 ext 226
Fax 908-541-1011

Cooling Tower Definition

Manufacturer	Marley	Fan Motor Speed	1800 rpm
Product	NC Steel	Required Fan Motor Output per cell *	38.90 BHp
Model	NC8403TLS2	Required Fan Motor Output total *	77.79 BHp
Cells	2	Fan Motor Capacity per cell	40.00 Hp
CTI Certified	Yes	Fan Motor Output per cell	40.00 BHp
Fan	7.000 ft, 8 Blades	Fan Motor Output total	80.00 BHp
Fan Speed	473 rpm, 10402 fpm	Air Flow per cell	126900 cfm
Fans per cell	1	Air Flow total	253800 cfm
		Static Lift	12.234 ft
		Distribution Head Loss	0.000 ft
		ASHRAE 90.1 Performance	43.5 gpm/Hp

Model Group Quiet Fan (L)

* Required Fan Motor Output assumes VFD operation

Conditions

Tower Water Flow	3000 gpm	Air Density In	0.07108 lb/ft³
Hot Water Temperature	95.00 °F	Air Density Out	0.07089 lb/ft³
Range	10.00 °F	Humidity Ratio In	0.01660
Cold Water Temperature	85.00 °F	Humidity Ratio Out	0.03098
Approach	7.80 °F	Wet-Bulb Temp. Out	89.80 °F
Wet-Bulb Temperature	77.20 °F	Estimated Evaporation	30 gpm
Relative Humidity	50.0 %	Total Heat Rejection	14947000 Btu/h
Capacity	100.9 %		

- This selection satisfies your design conditions.

Weights & Dimensions

	Per Cell	Total
Shipping Weight	7660 lb	15320 lb
Heaviest Section	7660 lb	
Max Operating Weight	16060 lb	32120 lb
Width	18.170 ft	18.170 ft
Length	8.400 ft	17.087 ft
Height	16.480 ft	

Minimum Enclosure Clearance

Clearance required on air inlet sides of tower without altering performance. Assumes no air from below tower.

Solid Wall	11.360 ft
50 % Open Wall	9.079 ft

Weights and dimensions do not include options; refer to sales drawings. For CAD layouts refer to file 8403_ALS.dxf

Cold Weather Operation

Heater Sizing (to prevent freezing in the collection basin during periods of shutdown)

Heater kW/Cell	15.0	12.0	9.0	7.5	6.0	4.5
Ambient Temperature °F	-21.09	-8.11	4.87	11.36	17.84	24.33

UPDATE™ Version 5.6.6
Product Data: 9/28/2017 (Current)

10/3/2017 7:42:17 AM

Job Information

Selected by

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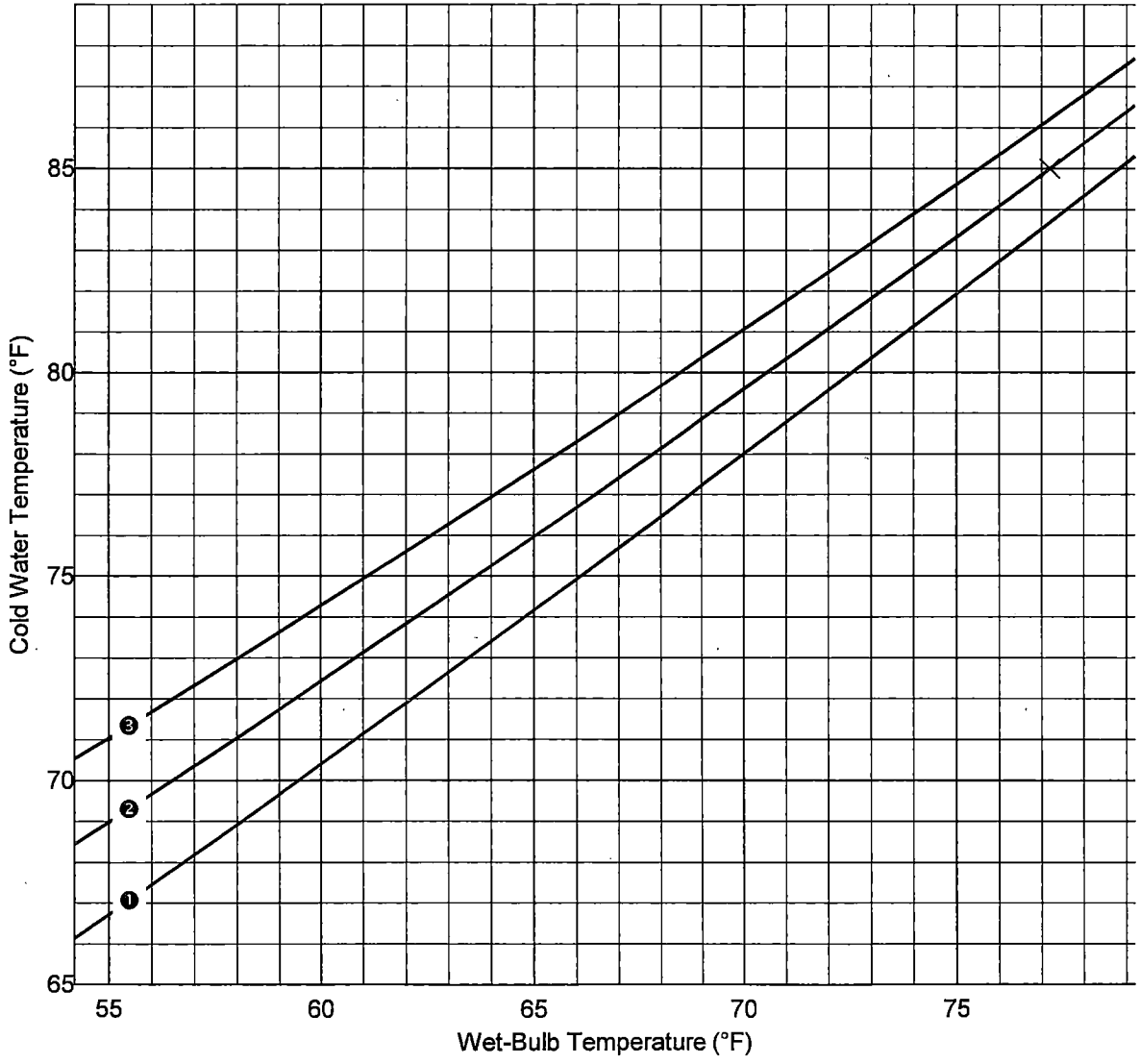
estrelko@dynatechsales.net

Eric Strelko
Tel 908-541-1010 ext 226
Fax 908-541-1011

Cooling Tower Definition

Manufacturer	Marley
Product	NC Steel
Model	NC8403TLS2
Cells	2
Fan	7.000 ft, 8 Blades
Fans per cell	1
Fan Motor Capacity per cell	40.00 Hp



Design Conditions

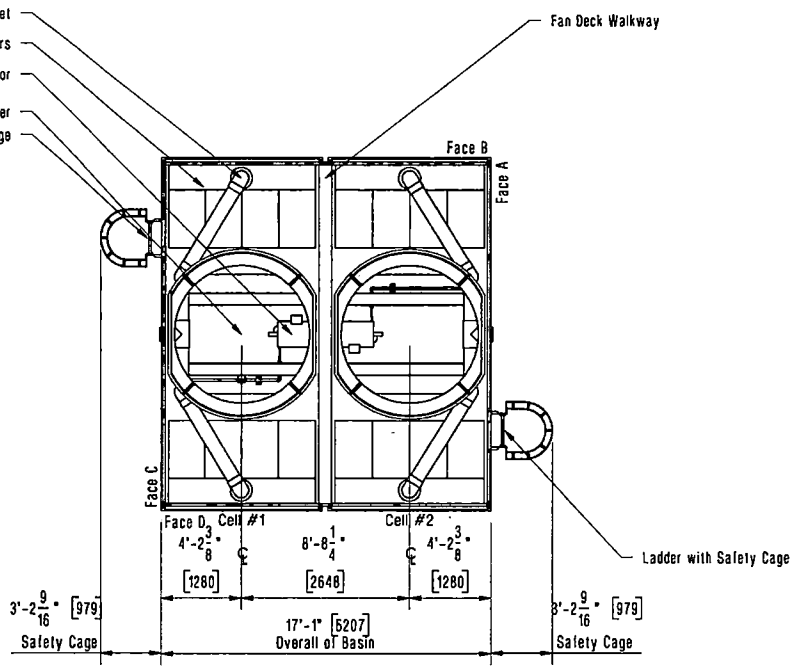
Tower Water Flow	3000 gpm
Hot Water Temperature	95.00 °F
Cold Water Temperature	85.00 °F
Wet-Bulb Temperature	77.20 °F

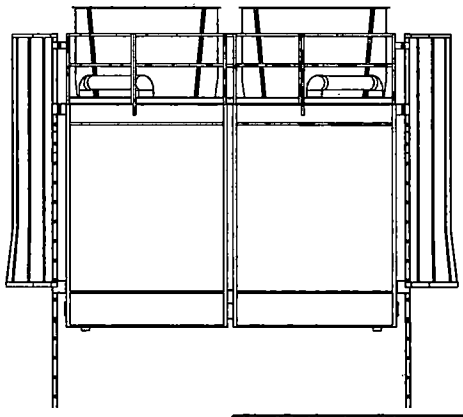
Curve Conditions

Tower Water Flow (100.0 %)	3000 gpm
Fan Speed (100.0 %)	473 rpm
Fan Motor Speed (100.0 %)	1800 rpm
Fan Motor Output per cell	40.00 BHp
Fan Motor Output total	80.00 BHp

Legend

❶ 8 °F Range
❷ 10 °F Range
❸ 12 °F Range
× Design Point





NOTES

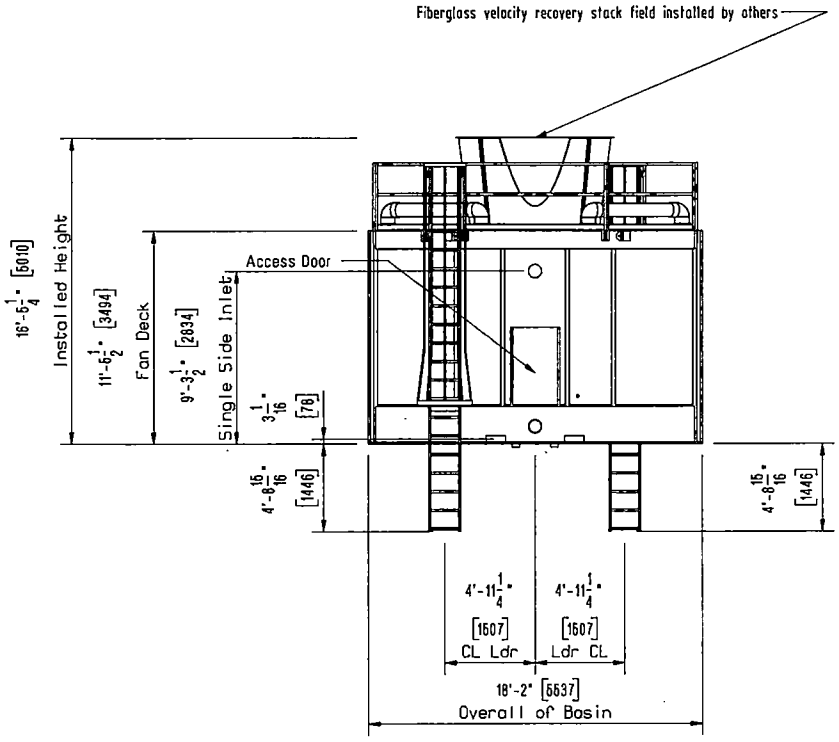
1. The tower assembly tolerance applicable to all dimensions is + or - 1/8" (3 mm). Consult suppliers of supporting structure for construction tolerances.
2. The units of measure are in IP (SI) units unless otherwise noted.
3. See Schematic Cased Elevation and Notes drawing for additional notes.

NC8403TLS2GGF - Schematic Plan and Louver Elevation
Ocean Medical Center
Brick, NJ, United States

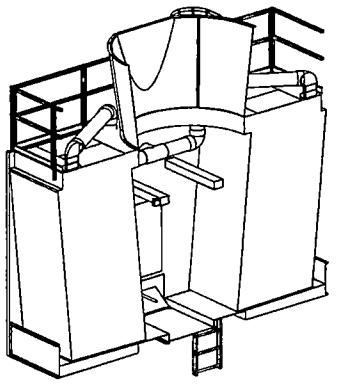
MARLEY

ORDER 10152997

DRAWN BY	CHECKED	REV BY	REV DR	DATE	APPROVED	DRAWING NUMBER	REV.
ERIC STRELKO_180116_161040731 V1	QTC			02/16/18	SYS	ES662149S	



Cased Face C



Interior View

NOTES

1. The fan motor must be locked out and inoperable before entering the tower. This warning has been placed on the access door.
2. The internal inlet piping, including flat face flange gaskets, which starts at the face of the inlet connection is provided by SPX CT. The piping external to the tower and its supports are provided by others. The external piping may not be supported from the tower.
3. The external inlet piping at the top of the tower is provided by SPX CT and installed in the field by others. This piping can be an obstacle to personnel on top of the tower. The installation detail drawings are included in the Literature Package shipped with the tower.
4. Multi-cell towers should include provisions to balance flow between cells.
5. An incoming riser and manifold must allow clearance for entry to the tower access doors. 4'-2" (1270 mm) is the minimum clearance needed to clear the optional access door or motor access platform.
6. To ensure maximum thermal performance the cooling tower must be installed level and plumb. Both of the air inlet faces must have adequate air supply. If obstructions exist, consult your SPX CT representative.
7. Contact your SPX CT sales engineer for the required pump head for this inlet arrangement.
8. Hoisting clips are provided for ease of unloading and positioning. For overhead lifts or where additional safety precautions are prudent, add slings beneath the tower. Adequate space has been provided for removal of the shackles and the 5 1/4" (133 mm) long pins from the hoist clips between the cells of a multi-cell tower. If the pin used is longer than 5 1/4" (133 mm), the cell may be slid into it's final position by using come-alongs at the base of the unit, after removal of shackle pins. See Hoisting Details drawing.
9. Flanged connections conform to Class 125 ANSI B16.1 specification. The bolt holes straddle the centerlines.
10. Construction of the ladder and guardrail: The guardrail is fabricated from galvanized structural tubing. Top rail, middle rail and posts are 1 1/2" (38 mm) square tube 1/8" (3 mm) thick. Toeboards are 12 gauge heavy mill galvanized steel. The ladder is aluminum 3" (76 mm) x 1 1/8" (29 mm) I-beam side rails and 1 1/4" (32 mm) serrated rungs.
11. The ladder and guardrail are field installed by others. The tower is shop modified to accept this option. The clips and hardware are provided by SPX CT for the field installation. The installation detail drawings are included in the literature package shipped with the tower.
12. Ladder extensions are provided in nominal lengths of 6' [1524mm] and 11' [4672mm] only. Field modification by others is required for extensions of different lengths. Anchorage of the bottom of the ladder extension for proper stability is by others.
13. O.S.H.A. standards recommend the use of a Safety Cage when the length of a single ladder exceeds 20'-0" (6096 mm).
14. O.S.H.A. standards recommend the use of an Access Door Platform if the door is 4'-0" (1219 mm) or higher above grade.
15. Single inlet options (side or bottom inlet) - This piping can be an obstacle to personnel on top of the tower.
16. The tower assembly tolerance applicable to all dimensions is + or - 1/8" (3 mm). Consult suppliers of supporting structure for construction tolerances.
17. The units of measure are in IP (SI) units unless otherwise noted.

NC8403TLS2GGF - Schematic Cased Elevation and Notes
Ocean Medical Center
Brick, NJ, United States

MARLEY

ORDER 10152997

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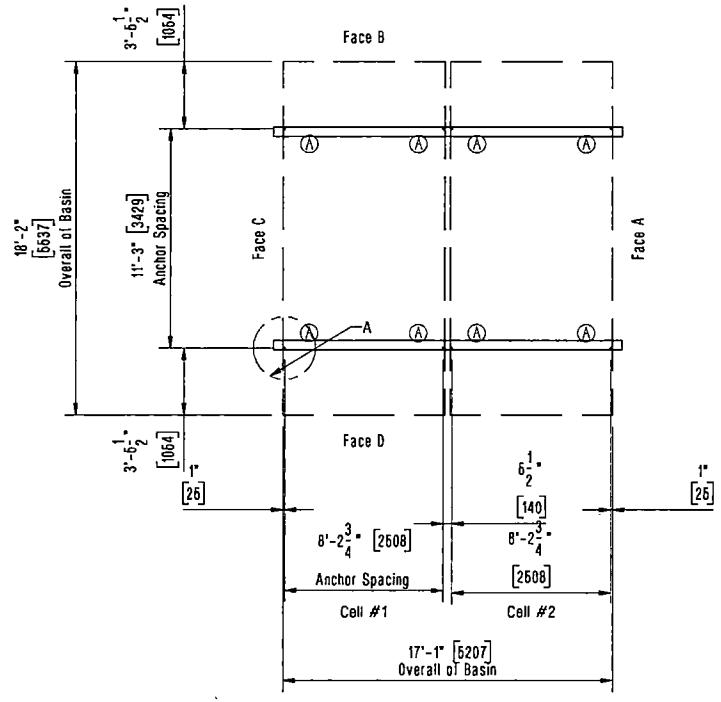
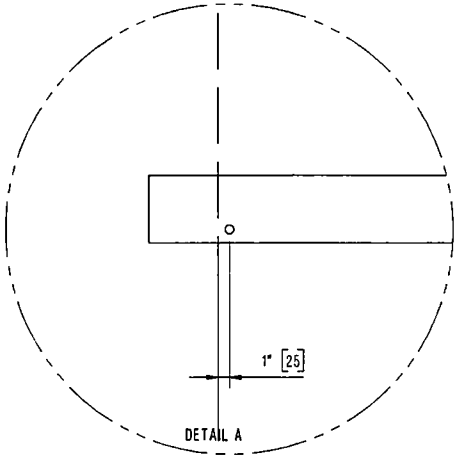
ERIC STRELKO_180116_151040731 V1	QTC			02/16/18	SYS	ES662149M	

Shipping Weight		Design Operating Loads			Wind Load		Seismic Load	
per Tower	per Cell	per Tower	per Cell	at A	Vert. Reaction at A	Horiz. Reaction at A	Vert. Reaction at A	Horiz. Reaction at A
16843 lb (7640 kg)	8422 lb (3820 kg)	33653 lb (15265 kg)	16826 lb (7632 kg)	4628 lb (2099 kg)	86.94 x P lb (8.08 x P kgf)	56.31 x P lb (5.23 x P kgf)	6462 x G lb (2478 x G kgf)	4079 x G lb (1850 x G kgf)

(4) 3/4" ASTM A307 or M20 Grade 4.6 anchor bolts are required per cell. These anchor bolts are capable of resisting 70 psf (3352 N/m²) wind load or 1.19 G seismic load applied to the tower. Wind and Seismic capacities are un-factored loads as determined by ASCE7-10. Determination of the site specific design wind and seismic loads are by others.





NOTES

1. SUPPORTING STEEL: The supporting steel is to be designed, constructed and furnished by the customer. It shall include customer supplied anchor bolts to suit the general dimensions of this drawing and of the Outlet Piping Plan drawing. The top surface of the supporting steel must be framed flush and level. The maximum beam deflection shall be limited to 1/360 of span, not to exceed 1/2" (13 mm) at the anchor bolts in order to assure that the cooling tower is level and plumb.
2. DESIGN OPERATING LOADS: The design operating loads shown in the above table are based upon the volume of water in the collection basin at shutdown. The shutdown water level has been sized to accommodate the maximum allowable flow rates. The design loads are shown for your use as a quick reference. The actual operating load is variable, and dependent upon the design flow rate per cell. Design loads are all based upon the recommended operating water level. Operating levels in excess of that recommended will result in loads exceeding the values stated. Consult a SPX CT representative for greater detail on this or any other subject.
3. WIND & SEISMIC LOADS: Reactions shown are the result of the wind/seismic load being applied perpendicular to the face of the tower structure. Loads are additive to the operating loads. Wind reactions can be calculated by multiplying by P, which is the wind pressure in psf for Imperial units and kgf/m² for metric units. Seismic reactions can be calculated by design G.
4. SHIPPING WEIGHTS AND MAXIMUM OPERATING LOADS: Values shown in table include the optional equipment weights.
5. NON-STANDARD ANCHORAGE LOCATION: The anchor bolt dimension shown can be varied upon request. Consult a SPX CT representative for specifics and to ensure that the appropriate modifications are added to the structure.
6. PIER SUPPORTS: The tower may be supported from piers at each anchor bolt location as an alternate. A pier should be at least 6" (152 mm) x 6" (152 mm).
7. VIBRATION ISOLATORS: The towers may be supported on vibration isolators. The isolators must be placed UNDER the supporting steel beams and not between the support beams and the tower.
8. The tower assembly tolerance applicable to all dimensions is + or - 1/8" (3 mm). Consult suppliers of supporting structure for construction tolerances.
9. The units of measure are in IP (SI) units unless otherwise noted.

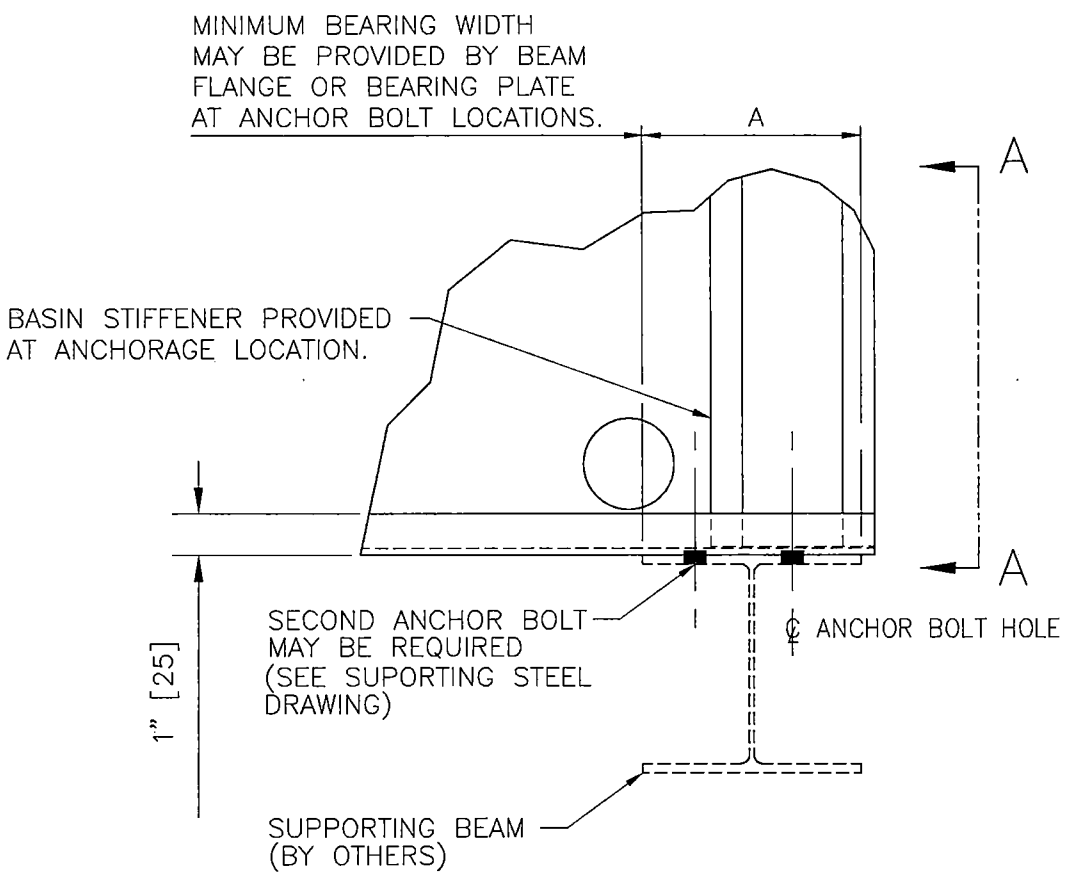
NC8403TLS2GGF - Supporting Steel Plan and Details
Ocean Medical Center
Brick, NJ, United States

MARLEY

ORDER 10152997

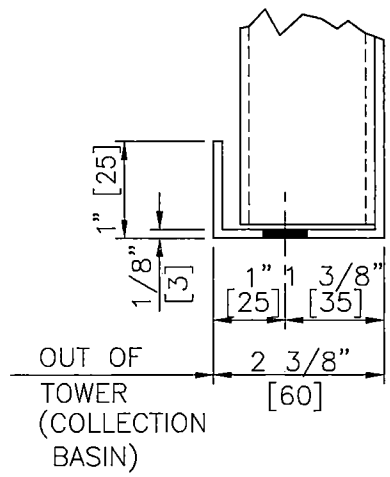
DRAWN BY	CHECKED	REV BY	REV CHK	DATE	APPROVED	DRAWING NUMBER	REV.
ERIC STRELKO_180116_161040731 V1	QTC			02/16/18	SYS	ES662149G	

TOWER MODEL	A
8401 THRU 8414	6" [152]
8422	8" [203]



SUPPORT BEARING DETAILS

(PARTIAL CASED FACE A OR C ELEVATION)



SECTION A–A

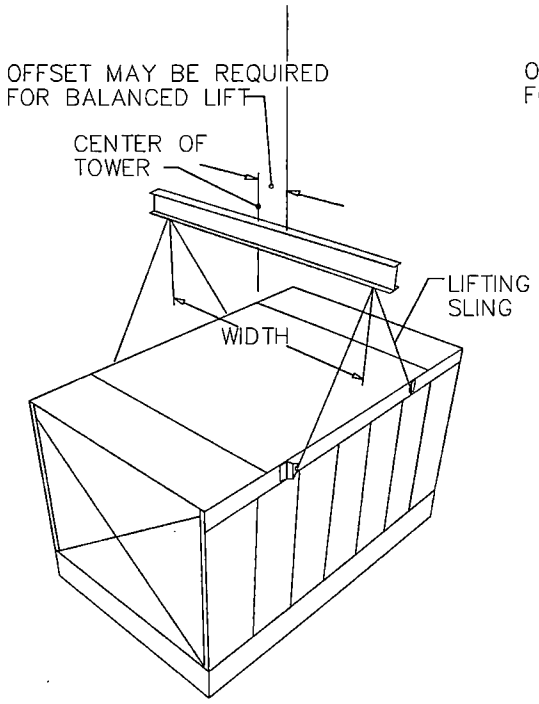
(LOUVER FACE B OR D)

GENERAL NOTES

1. TOLERANCE APPLICABLE TO DIMENSIONS SHOWN ARE DEPENDENT UPON FABRICATION, ASSEMBLY AND CONSTRUCTION TOLERANCES. FABRICATION TOLERANCE IS ±1/16" [2] & ASSEMBLY TOLERANCE IS ±1/8" [3]. CONSULT SUPPLIERS OF SUPPORTING STRUCTURE FOR CONSTRUCTION TOLERANCE. ALL OF THE DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS SHOWN INSIDE OF BRACKETS[ ] ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

I–P [SI] UNITS

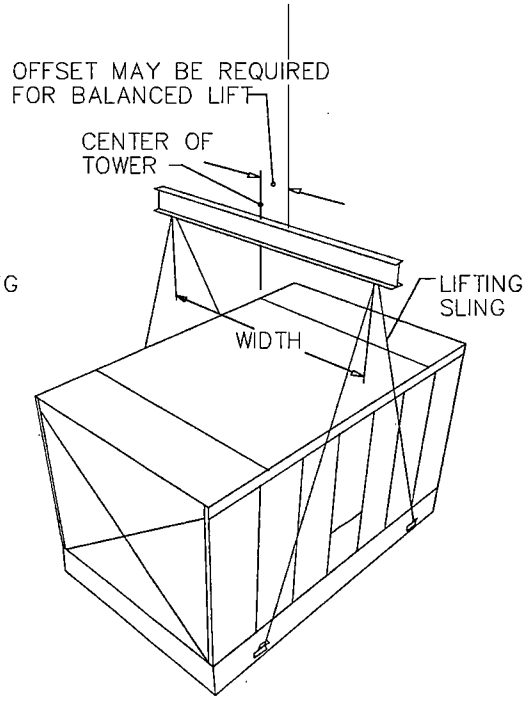
DRAWN BY	DRAWN DATE						
SCHENK_STD	07/20/2016	SUPPORT BEARING DETAILS NC8401 THRU NC8422 TOWERS				MARLEY®	
CHECKED BY	CHECKED DATE						
RELEASED BY	RELEASED DATE	ECM NUMBER	ORDER NUMBER	FORMAT	PLOT	DRAWING NUMBER	REV.
JENKINS_STD	07/28/2016	21681	–/–	ANSI A	1=1	Z0628641	A



TOWER UNITS WITH
HOISTING CLIPS AT THE TOP

8401 THRU 8407

TOP MODULE OF 8410, 8411, 8412, 8413 & 8414



TOWER UNITS WITH
HOISTING CLIPS AT THE BOTTOM

8409

BOTTOM MODULE OF 8410, 8411, 8412, 8413 & 8414

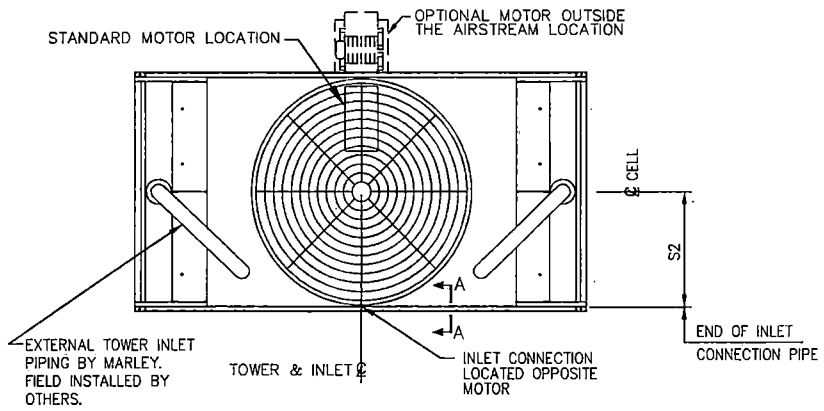
TOWER MODEL	TOWER WIDTH	MINIMUM SLING LENGTH
8401	6'-7" [2007]	5'-6" [1676]
8402	8'-6" [2591]	6'-0" [1829]
8403	8'-6" [2591]	8'-0" [2438]
8405	10'-0" [3048]	8'-0" [2438]
8407	12'-0" [3658]	8'-6" [2591]
8409	14'-0" [4267]	17'-6" [5334]
8410 TOP	12'-0" [3658]	9'-0" [2743]
8410 BOTTOM	12'-0" [3658]	16'-6" [5029]
8411 TOP	12'-0" [3658]	9'-0" [2743]
8411 BOTTOM	12'-0" [3658]	16'-6" [5029]
8412 TOP	14'-0" [4267]	9'-0" [2743]
8412 BOTTOM	14'-0" [4267]	16'-6" [5029]
8413 TOP	12'-0" [3658]	9'-0" [2743]
8413 BOTTOM	12'-0" [3658]	16'-6" [5029]
8414 TOP	14'-0" [4267]	9'-0" [2743]
8414 BOTTOM	14'-0" [4267]	16'-6" [5029]

NOTES:

1. ALL HOISTING CLIP HOLES ARE 1 1/4" [32].
2. OVERALL LENGTH OF SHACKLE PIN SHOULD NOT EXCEED 5 1/4" [133].
3. FOR OVERHEAD LIFTS OR WHERE ADDITIONAL SAFETY IS REQUIRED, ADD SLINGS BENEATH THE TOWER UNIT.
4. ALL DIMENSIONS SHOWN INSIDE OF BRACKETS[ ] ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

I-P [SI] Units

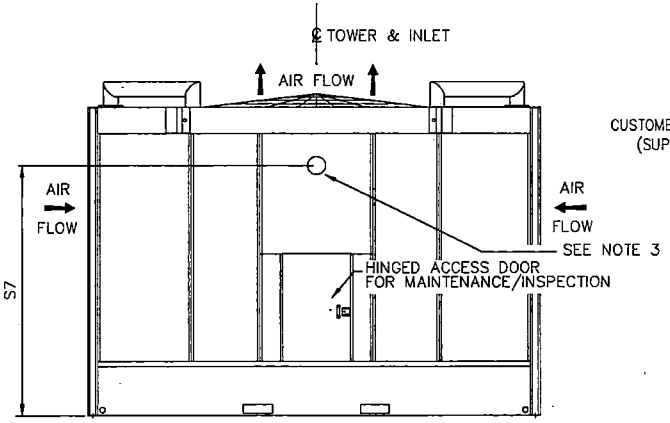
DRAWN BY	DRAWN DATE						
MA_STD	01/22/2016	HOISTING DETAILS				SPX COOLING TECHNOLOGIES	
CHECKED BY	CHECKED DATE	8401 THRU 8414 TOWERS					
ABDULFATTAH	01/27/2016						
RELEASED BY	RELEASED DATE	ECM NUMBER	ORDER NUMBER	FORMAT	PLOT	DRAWING NUMBER	REV.
ABDULFATTAH	01/27/2016	20945	-/-	ANSI B	1=1	Z0628615	A



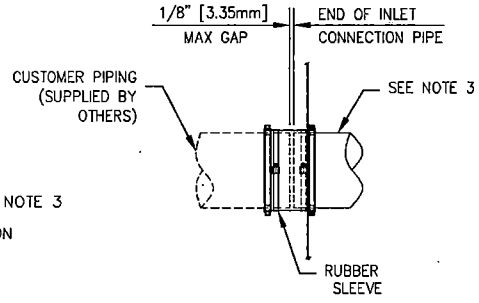
PLAN VIEW

TOWER MODEL	DIMENSIONS		
	S1	S2	S7
8401	6"	3'-3 1/16" [992]	7'-6 7/16" [2297]
8402	8"	4'-1 3/4" [1264]	7'-6 5/8" [2302]
8403	8"	4'-2 1/8" [1273]	9'-3 9/16" [2834]
8405	10"	4'-11 1/4" [1505]	9'-2 9/16" [2808]
8407	10"	5'-11 3/8" [1813]	9'-1 11/16" [2786]
8409	10"	6'-9 5/16" [2065]	9'-2 1/8" [2797]
8410	12"	5'-11 1/4" [1810]	13'-3 1/2" [4051]
8411	12"	5'-11 1/4" [1810]	16'-1 9/16" [4916]
8412	12"	6'-11 3/8" [2118]	16'-1 9/16" [4916]
8413	12"	5'-11 1/4" [1810]	19'-10 5/8" [6061]
8414	12"	6'-11 3/8" [2118]	19'-10 5/8" [6061]

NCWD	S1	S2	S7
8413	12"	5'-11 1/4" [1810]	19'-11 1/2" [6083]



SIDE ELEVATION



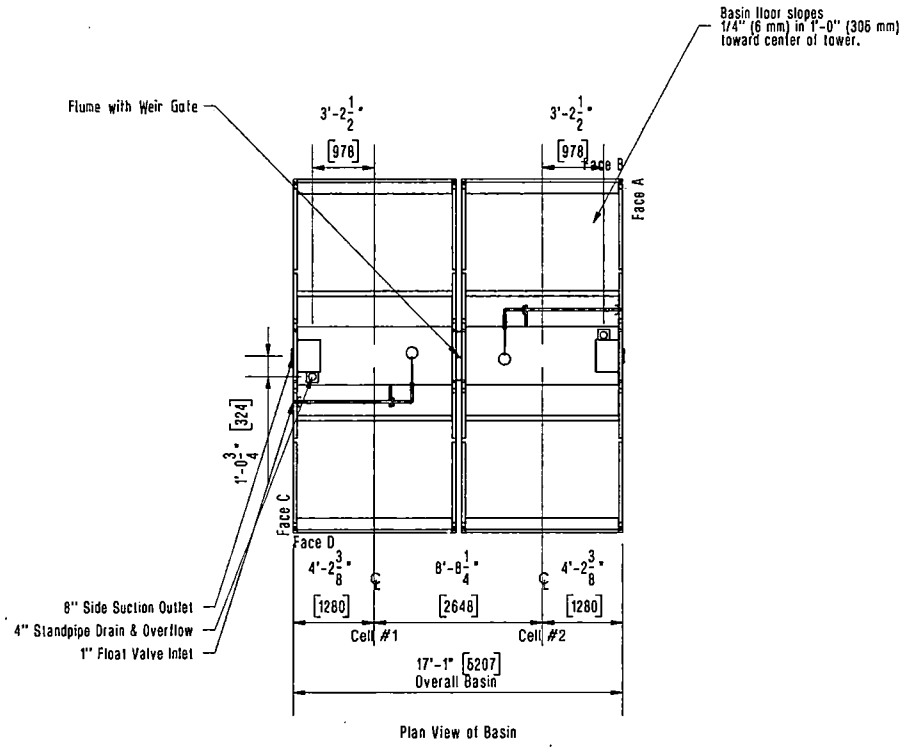
SECTION A-A
(INLET CONNECTION)

NOTES

1. ALL INTERNAL INLET PIPING TO THE FACE OF THE INLET CONNECTION, INCLUDING RUBBER SLEEVE IS SUPPLIED WITH THE COOLING TOWER. EXTERNAL PIPING AND SUPPORTS BEYOND THE INLET CONNECTION IS BY OTHERS. EXTERNAL PIPING MAY NOT BE SUPPORTED FROM THE TOWER.
2. ASSEMBLY TOLERANCE IS ±1/8" [3]. CONSULT SUPPLIERS OF SUPPORTING STRUCTURE FOR CONSTRUCTION TOLERANCE. ALL OF THE DIMENSIONS SHOWN ARE IN I-P (INCH-POUND) UNITS UNLESS OTHERWISE NOTED.
3. S1 DIAMETER INLET CONNECTION USES A FIELD INSTALLED (SUPPLIED WITH TOWER) RUBBER SLEEVE WITH DOUBLE CLAMPS AT EACH PIPE.
4. USE THIS DRAWING IN CONJUNCTION WITH THE SCHEMATIC DETAIL DRAWINGS.
5. MULTI-CELL TOWERS SHOULD INCLUDE PROVISIONS TO BALANCE FLOW BETWEEN CELLS.
6. CONTACT YOUR SALES ENGINEER FOR THE REQUIRED PUMP HEAD FOR THIS ARRANGEMENT.
7. ALL DIMENSIONS SHOWN INSIDE OF BRACKETS[ ] ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

I-P [SI] UNITS

DRAWN BY	DRAWN DATE					
HOLMES_STD	05/25/2017	SIDE SINGLE INLET CONNECTION DETAILS NC8401-14				SPX COOLING TECHNOLOGIES
CHECKED BY	CHECKED DATE					
ONG_STD	05/30/2017					
RELEASED BY	RELEASED DATE	ECM NUMBER	ORDER NUMBER	FORMAT	PLOT	DRAWING NUMBER / REV.
ONG_STD	05/30/2017	22693	-/-	ANSI B	1=1	Z0628332 / B



Plan View of Basin

NOTES

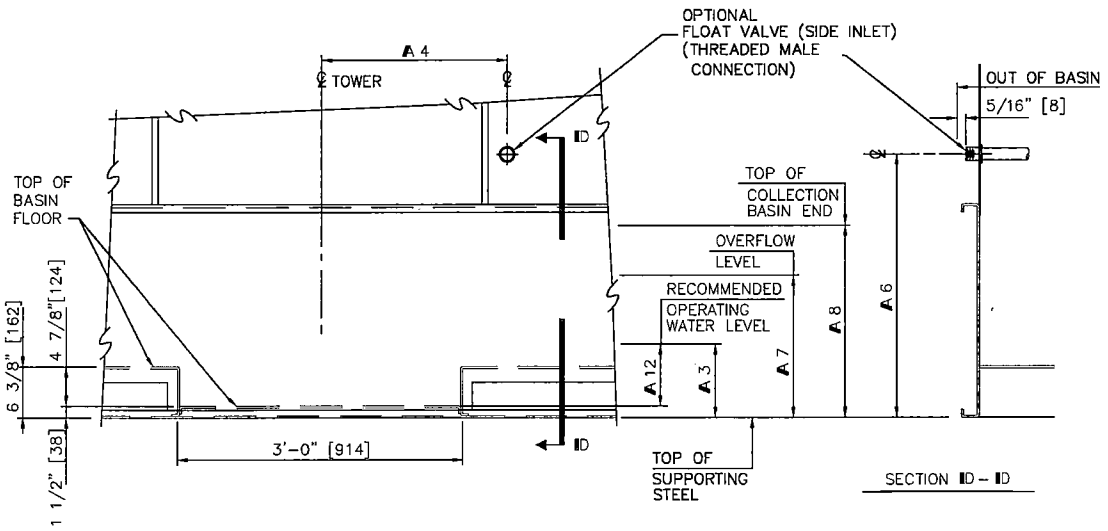
1. Flanged connections conform to Class 125 ANSI B16.1 specification. The bolt holes straddle the centerlines.
2. All piping supports are by others. Do NOT support outlet piping from the tower.
3. The collection basin piping accessories shown on this drawing are furnished by SPX CT.
4. The standpipe overflow is to be field installed by others.
5. The design operating loads shown in the table on the Grillage Details drawing are based upon the volume of water in the collection basin at shutdown. The shutdown water level has been sized to accommodate the maximum allowable flow rates. The actual operating load is variable, and is dependent upon the design flow rate per cell. Design loads are all based upon the recommended operating water level. Operating levels in excess of that recommended can result in loads exceeding values stated. Consult a SPX CT representative for greater detail on this or any other subject.
6. Basin flumes are shipped inside the tower and are to be field installed by others. The connecting collars are shop installed.
7. The tower assembly tolerance applicable to all dimensions is + or - 1/8" (3 mm). Consult suppliers of supporting structure for construction tolerances.
8. The units of measure are in IP (SI) units unless otherwise noted.

NC8403TLS2GGF – Piping Plan
Ocean Medical Center
Brick, NJ, United States

MARLEY

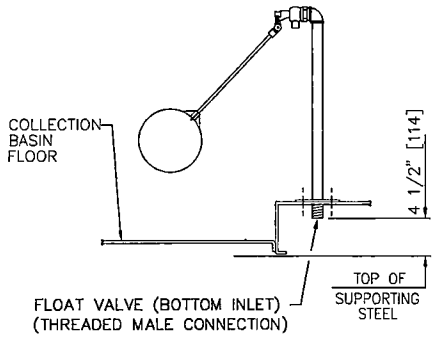
ORDER 10152997

DRAWN BY	CHECKED	REV BY	REV CHK	DATE	APPROVED	DRAWING NUMBER	REV.
ERIC STRELKO_180116_151040731 V1	QTC			02/16/18	SYS	ES662149P	



EXTERIOR CELL ELEVATION

(FACES "A" OR "C")



OPTIONAL FLOAT VALVE

(BOTTOM INLET)

SEE "OUTLET PIPING PLAN" DRAWING FOR FLOAT VALVE LOCATION, SIZE & TYPE

TOWER MODEL	DIMENSIONS						
	A3	A4	A6		A7	A8	A12
			1" DIAMETER	2" DIAMETER			
8401	8 1/2" [216]	1'-6 3/16" [462]	2'-3 11/16" [703]	2'-4 3/16" [716]	1'-3" [381]	1'-8" [508]	7" [178]
8402	8 1/2" [216]	1'-10 1/2" [572]	2'-3 11/16" [703]	2'-4 3/16" [716]	1'-3" [381]	1'-8" [508]	7" [178]
8403	8 1/2" [216]	2'-4 3/8" [721]	2'-6 7/8" [784]	2'-7 3/8" [797]	* 1'-5 1/4" [438]	1'-10 1/4" [565]	7" [178]
8405	8 1/2" [216]	1'-11 7/8" [606]	2'-6 7/8" [784]	2'-7 3/8" [797]	* 1'-5 1/4" [438]	1'-10 1/4" [565]	7" [178]
8407	9 1/2" [241]	2'-2 3/8" [670]	2'-6 7/8" [784]	2'-7 3/8" [797]	* 1'-5 1/4" [438]	1'-10 1/4" [565]	8" [203]
8409	9 1/2" [241]	2'-2 3/8" [670]	2'-6 7/8" [784]	2'-7 3/8" [797]	* 1'-5 1/4" [438]	1'-10 1/4" [565]	8" [203]
8410	9 1/2" [241]	2'-5 3/4" [755]	2'-9 15/16" [862]	2'-10 7/16" [875]	1'-7 3/8" [492]	2'-2 1/4" [667]	8" [203]
8411	9 1/2" [241]	2'-5 3/4" [755]	2'-9 15/16" [862]	2'-10 7/16" [875]	1'-9 1/4" [540]	2'-2 1/4" [667]	8" [203]
8412	9 1/2" [241]	2'-5 3/4" [755]	2'-9 15/16" [862]	2'-10 7/16" [875]	1'-9 1/4" [540]	2'-2 1/4" [667]	8" [203]
8413	9 1/2" [241]	2'-5 3/4" [755]	2'-9 15/16" [862]	2'-10 7/16" [875]	1'-11 1/4" [591]	2'-2 1/4" [667]	8" [203]
8414	9 1/2" [241]	2'-5 3/4" [755]	2'-9 15/16" [862]	2'-10 7/16" [875]	1'-11 1/4" [591]	2'-2 1/4" [667]	8" [203]

* 1'-6 1/2" [470] ON TOWERS WITH 12" OR 14" DIA. SIDE SUCTION OUTLET

GENERAL NOTES

1. FOR FLOAT VALVE INLET DIAMETER SIZING INFORMATION, SEE DWG. 98-22969 [98-22970].
2. TOLERANCE APPLICABLE TO DIMENSIONS SHOWN ARE DEPENDENT UPON FABRICATION, ASSEMBLY AND CONSTRUCTION TOLERANCES. FABRICATION TOLERANCE IS ±1/16" [2] AND ASSEMBLY TOLERANCE IS ±1/8" [3]. CONSULT SUPPLIERS OF SUPPORTING STRUCTURE FOR CONSTRUCTION TOLERANCE. ALL OF THE DIMENSIONS SHOWN ARE IN INCHES UNLESS OTHERWISE NOTED.
3. ON THE 8401, IF A SUMP OR BOTTOM OUTLET OPTION IS SUPPLIED WITH AN ANTI-VORTEX PLATE, A FLOAT VALVE MAY NOT BE IN THE SAME CELL.
4. ALL DIMENSIONS SHOWN INSIDE OF BRACKETS[ ] ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
5. REFER TO SUPPORTING STEEL DRAWING FOR DESIGN OPERATING LOADS.
6. THE RECOMMENDED WATER LEVEL IS FOR CELLS WITH OUTLETS. THE OPERATING WATER LEVEL IN ADJACENT CELLS MAY BE GREATER DEPENDING ON THE GPM, NUMBER OF OUTLES AND FLUME ARRANGEMENT.

I-P [SI] UNITS

DRAWN BY	DRAWN DATE						
MA_STD	01/22/2016	COLLECTION BASIN WATER LEVEL DETAILS					
CHECKED BY	CHECKED DATE	8401 THRU 8414 TOWERS					
ABDULFATTAH	01/26/2016						
RELEASED BY	RELEASED DATE	ECM NUMBER	ORDER NUMBER	FORMAT	PLOT	DRAWING NUMBER	REV.
ABDULFATTAH	01/27/2016	20945	-/-	ANSI B	1=1	Z0341072	A

SPX COOLING TECHNOLOGIES

weg		No.:
		Date: 18-DEC-2015

DATA SHEET
Three-phase induction motor - Squirrel cage rotor

Customer	:
Product line	: W22 Cooling Tower Motors: NEMA Premium - TEFC

Frame	: 324T
Output	: 40 HP
Frequency	: 60 Hz
Poles	: 4
Full load speed	: 1775
Slip	: 1.39 %
Voltage	: 208-230/460 V
Rated current	: 104-94.2/47.1 A
Locked rotor current	: 575/287 A
Locked rotor current (Il/In)	: 6.1
No-load current	: 32.0/16.0 A
Full load torque	: 117 lb.ft
Locked rotor torque	: 220 %
Breakdown torque	: 240 %
Design	: B
Insulation class	: F
Temperature rise	: 80 K
Locked rotor time	: 20 s (hot)
Service factor	: 1.25
Duty cycle	: S1
Ambient temperature	: -20°C - +40°C
Altitude	: 1000
Degree of Protection	: IP55
Approximate weight	: 492 lb
Moment of inertia	: 9.1624 sq.ft.lb
Noise level	: 66 dB(A)

	D.E.	N.D.E.
Bearings	6312 2RS-C3	6212 2RS-C3
Regreasing interval	—	—
Grease amount	—	—

Load	Power factor	Efficiency (%)
100%	0.85	94.1
75%	0.80	94.1
50%	0.72	93.6

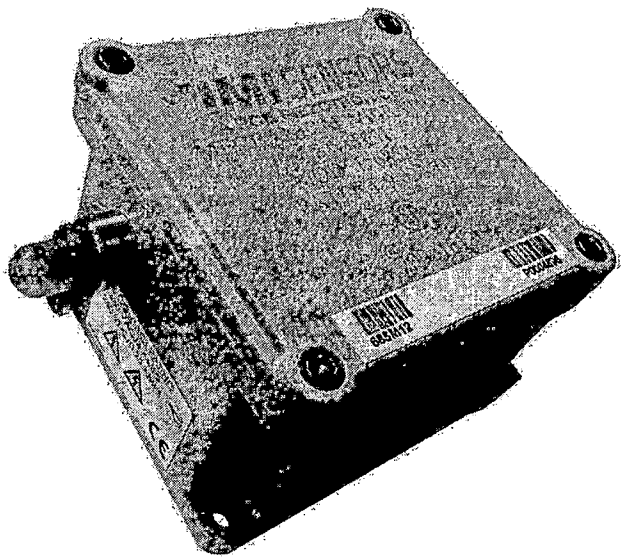
Notes:
Typical Motor Data Sheet

Performed by	Checked

IMI vibration switch specifications

Product Benefits

- Unique patented, spring loaded, magnetically coupled sensor, requiring no power
- Offers cost effective protection for critical situations
- Provides better control over trip sensitivity
- Remote reset models available



Reset Functions:

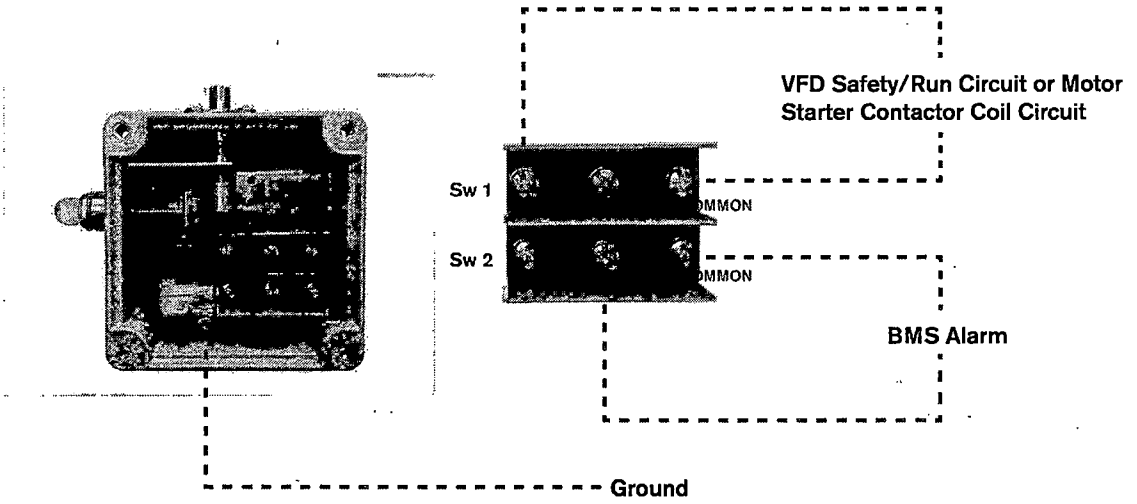
Part 2396245: Manual Reset
Part 2442494: 24 VDC Remote Reset
Part 2442495: 120 VAC 60 Hz Remote Reset
Part 2442496: 240 VAC 50 Hz Remote Reset

Model	Reset	Relay Contact Output	Measurement Range	Frequency Range
2396245	Manual external reset button	One - DPDT form "C" 15 amp at 120 VAC	Inertial 1-7 g pk 0-68.7 m/s² pk adjustable	0 to 6000 cpm 0-100 Hz
2442494	Manual external reset button and 24 VDC remote reset solenoid			
2442495	Manual external reset button and 120 VAC 60 Hz remote reset solenoid			
2442496	Manual external reset button and 240 VAC 50 Hz remote reset solenoid			

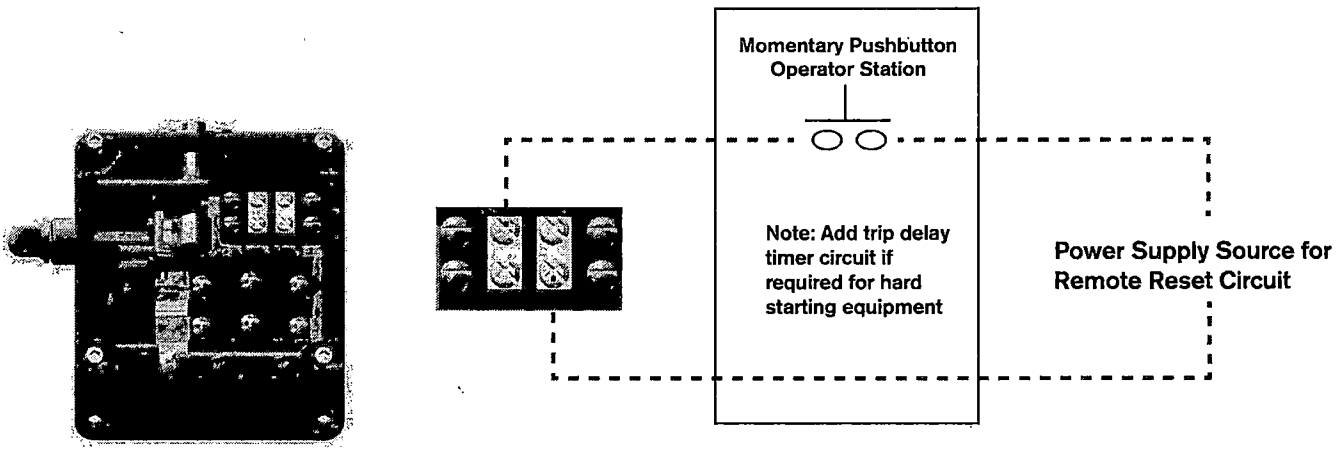
Model	Startup Delay	Trip Indication	Enclosure type	Conduit fitting	Electrical Certification
2396245	No	External red indicator	NEMA 4X / IP56 epoxy painted aluminum	One - 3/4 inch NPT threaded female connection	c SP us CE
2442494	Timer required in customer's start circuit				
2442495					
2442496					

MARLEY®

Typical output contact wiring



Typical remote reset wiring

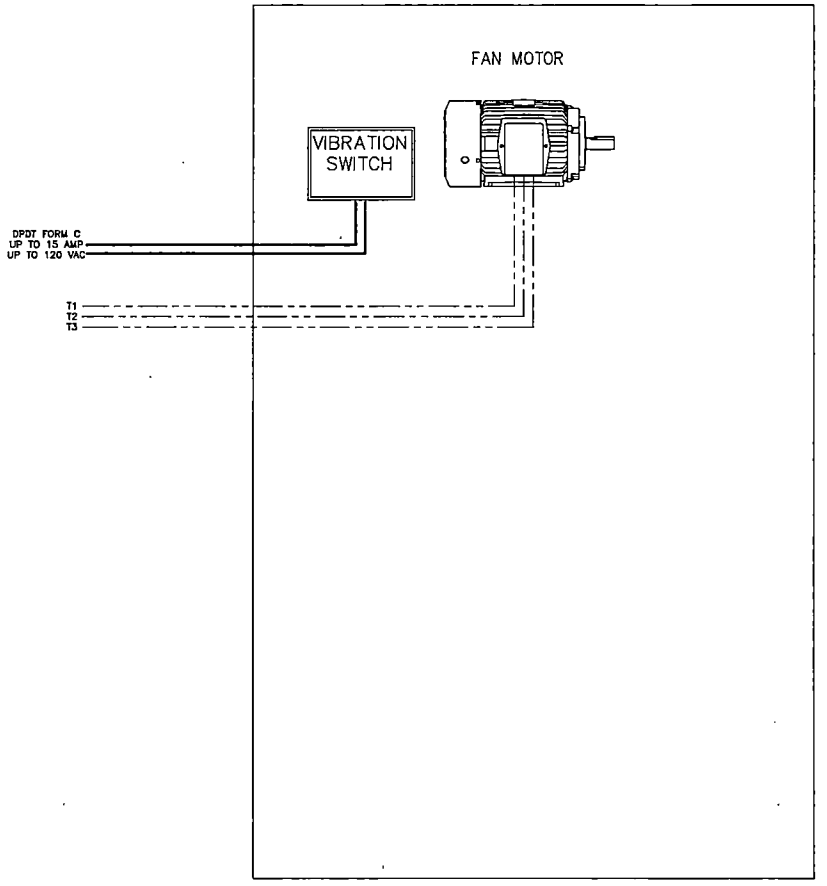


SPX COOLING TECHNOLOGIES, INC.
7401 WEST 129 STREET
OVERLAND PARK, KS 66213 USA
913 664 7400 | spxcooling@spx.com
spxcooling.com

SPEC-IMI-17 | ISSUED 03/2017

SPX

COOLING TOWER CELL



—·—·— = POWER WIRING BY OTHERS

——— = CONTROL WIRING–BY OTHERS

DRAWN BY	DRAWN DATE						
PENNISTON_ST	05/12/2017	TYPICAL ONE LINE DIAGRAM MOTOR ONLY–VIBSW				MARLEY	
CHECKED BY	CHECKED DATE						
RELEASED BY	RELEASED DATE	ECM NUMBER	ORDER NUMBER	FORMAT	PLOT	DRAWING NUMBER	REV.
PENNISTON_ST	05/16/2017		–/–	ANSI B	1=1	Z1052317	

JT ENGINEERING

TOWNSHIP OF BRICK
RELEASED FOR PERMIT INITIAL DATE
Building Subcode 09/10/18
Plumbing Subcode
Fire Subcode
Electrical Subcode 3/13/18
Plan Reviewer
Plans Released
Construction Official

ENGINEERING REPORT

February 26, 2018

FILE COPY

Eric Strelko, PE
VP HVAC Products Group
Dyna-Tech
55 Columbia Road
Branchburg, NJ 08876

Re: Structural Review of Existing Cooling Tower Dunnage
Ocean Medical Center
425 Jack Martin Boulevard
Brick, NJ
Project #: 1800_15

Dear Mr. Strelko,

Pursuant to your request, we performed a site visit on February 21, 2018 to review the existing steel dunnage supporting a cooling tower. It is our understanding the existing cooling tower will be decommissioned and replaced with similar type equipment; as a result, you have requested our office review the condition and structural capacity of the existing steel dunnage.

STEEL DUNNAGE:
The existing dunnage consisted W12 steel beams and girders. All of the steel dunnage appeared to be in good condition with minimal signs of rust and deterioration. The steel framing was supported on cast-in-place concrete piers. The footings were concealed at the time of our visit; however, we did not observe any signs of structural issues with the steel dunnage or concrete piers to suspect there are structural issues with the existing foundations.

MECHANICAL EQUIPMENT:
Based on the specifications provided to our office, the existing cooling tower will be replaced with Marley Model NC8403TLS2GGF Cooling Tower, with an operating weight of 33,653 lbs. Based on the specifications, the new equipment will be located on the existing steel dunnage similarly to the original cooling tower. Connection of the equipment to the steel dunnage shall be in accordance with the manufacturer's specifications.

CONCLUSION:
Based on our structural review and calculations performed by our office, the existing steel dunnage has sufficient structural capacity to support the proposed replacement cooling tower. At this time, no further structural reinforcement is required.

Please reference the attached photographs depicting the existing steel dunnage and cooling tower layout.

If you have any questions or need clarification, please do not hesitate to contact us.

Sincerely,

Jason T. Tarantino, PE
Principal

200 Lawrence Road, Lawrence Township, New Jersey 08648
T: 609-303-0236 • F: 609-303-0237 • www.jt-pe.com

APPENDIX

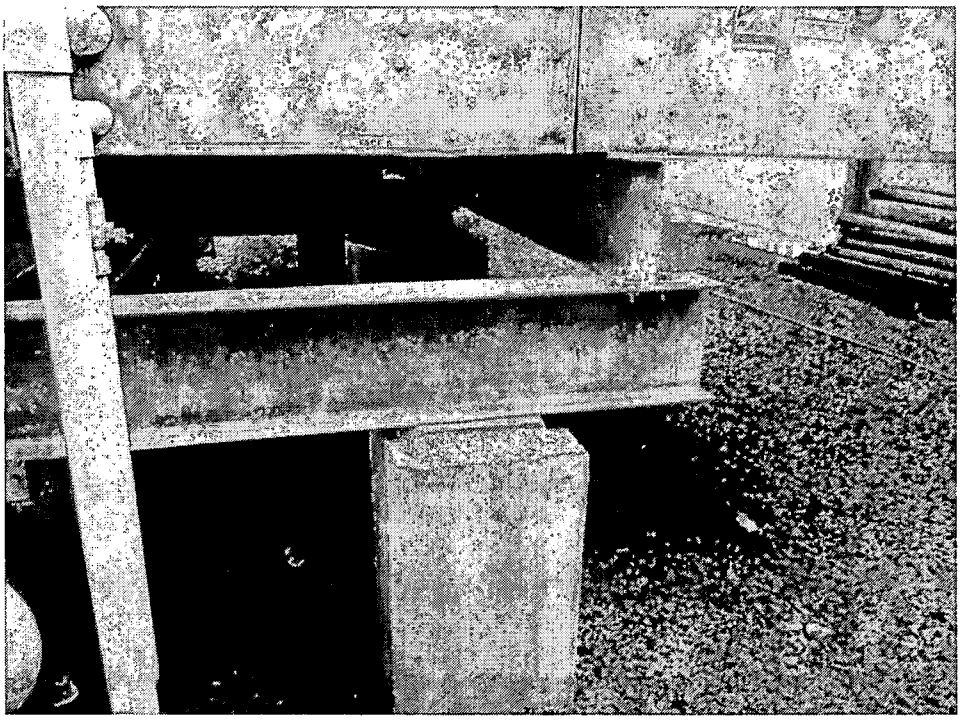


Figure 1 - Existing steel dunnage

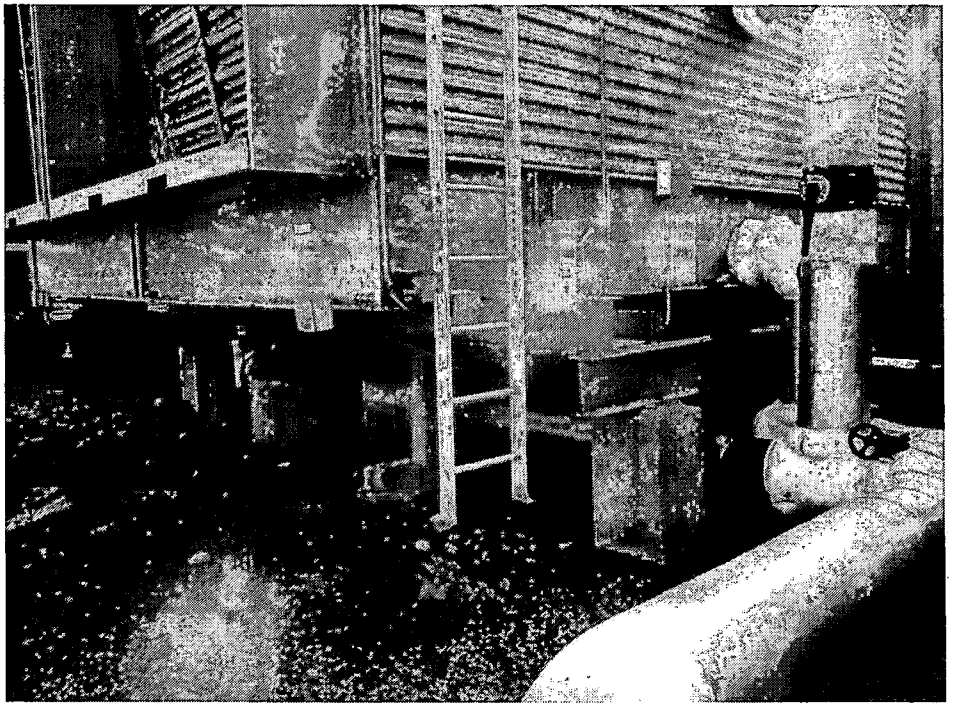


Figure 2 - Existing Steel Dunnage & Cooling Tower