



State of Delaware
Department of Natural Resources and Environmental Control
Delaware Division of Parks and Recreation
89 Kings Highway
Dover, Delaware 19901

ADDENDUM No. TWO

Project Name: Splash Park
Trap Pond State Park

Contract No.: NAT24825-TPSPSPLASH
Date of Issue: Thursday, May 8, 2025

Notice No. 1: Attach this addendum to the Project Manual for this project. It modifies and becomes part of the Bidding Documents. Work or material not specifically mentioned herein is to be as described in the main body of the specification and as shown on the drawings.

Bids Due: Thursday, May 15, 2025, at 1:00 p.m. (via hard copy or email, see below)
DNREC- Division of Parks and Recreation, 89 Kings Hwy, Dover DE 19901

Bid Opening: Thursday, May 15, 2025, at 1:00 p.m.
To be conducted online via Microsoft Teams
[Click here to join the meeting.](#)
Or join with audio-only by calling 302-504-8986 and using ID: 865 320 106#

Drawing Updates/Notes:

1. Highlighted C1.6 - PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN to indicate two areas within the LOD where trees are to remain.

Specifications/Project Manual Updates/Notes:

1. **Refer to Specification 00 41 13 - BID FORM**
Replace Specification 00 41 13 - BID FORM with the attached specification. The following revision has been made that generally includes stating that an enlarged Restroom Building is part of Alternate #1. The revision has been clouded.
2. **Refer to Specification 10 14 00 - SIGNAGE**
Replace Specification 10 14 00 - SIGNAGE with the attached specification. The following revisions have been made that generally include adding Informational Signs, Warning Signs, and sign post accessories. The revisions have been clouded.
3. **Refer to Specification 13 28 00 - PREFABRICATED CONCRETE BUILDING**
Change Part 3, 1.1.C to read, "The Contractor will make final mechanical and electrical connections after the building is placed by manufacturer."

Change Part 3, 1.2.A to read, “The Contractor shall provide adequate access and a level pad for the crane and semis to sit side by side under their own power. Working radius shall be 35 feet from center pin on crane.”

Change Part 3, 1.2.B to read, “The Contractor shall lay a foundation suitable for building to sit on. Foundation shall be level to within 1/4 inch.”

Change Part 3, 1.2.C to read, “The Contractor shall rough in mechanicals according to mechanical rough in drawing provided by building manufacturer. Mechanicals shall be terminated at top of foundation. Final mechanical connections shall be done by Contractor, including floor drains.

Questions:

- 2 Question: Per spec section 132800, prefabricated buildings 1.1.C.3 note exterior finish to have simulated cedar shingle and metal roofing. Please confirm which prefabricated buildings receive shingle and metal roofing, as there are discrepancies in roofing material types.
Response: Line 1.1-C3 shall read “Exterior finish: Simulated board and batten siding with simulated metal roofing.”
- 3 Question: What is the extent of the existing conditions on the site plan for site clearing? Please provide plans for existing conditions.
Response: Drawings C1.2 and C1.4 identify existing and proposed tree lines along the Limits of Disturbance. Drawing C1.6 delineates two areas within the larger LOD where trees are to remain and are protected with orange fencing – see highlighted C1.6 attached for reference. All other areas within the LOD are to be cleared.
- 4 Question: Addendum #1, 1.1C states that there is only one alternate for this project, and that is the addition of two additional splash pads. Spec 012300 schedule of alternates includes two additional restrooms, and in spec section 132800, there is an additional alternate to provide six single-user restrooms for building number 1. Please confirm that there is only one alternate, which is for adding two splash pads.
Response: Add Alternate #1 shall remain as specified in the original specifications and drawings dated March 28, 2025. Providing a larger Restroom Building is part of Add Alternate #1. Please see updated Bid Form attached.
- 5 Question: Drawings are showing a main line 2” carbon filter installed after the water softener; however, I find no specs or information on the carbon filter in the project manual? Should I include a main line point of entry 2” carbon filter with my water treatment proposals to the general contractors?
Response: BOD for the carbon filter can be found in Note 14 on P1.1.
- 6 Question: Regarding Prevailing Wages: Can it be confirmed (or corrected) that the splash pad work will fall under Sussex County, Heavy Construction - which would cover the following:
Concrete flat work as well as feature foundations and piping underneath?
Piping from flatwork to balance tank?
Balance tank and all work within?
Piping from balance tank to mechanical room?
Assuming (some or all) the above is confirmed, can piping underground be assigned to Laborers, as commonly allowed in other jurisdictions?

- Response: Please refer all prevailing wage questions to the [Department of Labor](#)
- 7 Question: Regarding Prevailing Wages: Can it be confirmed (or corrected) that work within the mechanical room will fall under Sussex County, Building Construction?
Assuming the above is confirmed, is setting of equipment and piping above ground to be assigned to Plumbers?
Response: Please refer all prevailing wage questions to the [Department of Labor](#)
- 8 Question: Regarding Prevailing Wages: Can it be confirmed (or corrected) that the prevailing wages include base as well as fringes?
Assuming the above is confirmed, can the Cement Finishers at 23.71 also be confirmed or corrected (seems low)?
Assuming the above is confirmed, can the Plumbers/Pipe Fitters/Steamfitters at 25.47 also be confirmed or corrected (seems low)?
Response: Please refer all prevailing wage questions to the [Department of Labor](#)
- 9 Question: Aquatics refer to Civil drawings for concrete flatwork colors, but Civil drawings do not appear to show these:
Is the concrete flatwork, including spray ground wet areas, to be gray concrete or colored?
If to be colored, have these colored been selected, and if so what are they?
If they are to be colored, are the colors to be integral to the concrete, or stained?
Response: The concrete flatwork is not to be colored.
- 10 Question: On spray ground piping winterize, this is shown between the Aquatics and Civil drawings connected to the bottom of the spray ground wet areas drains. There does not appear to be valve(s) to close this system so as to not lose operating water in season. Can this be clarified and/or addressed?
Response: The manufacturer of the drain shall provide a plug as part of the assembly that will screw into the 4" F-NPT. This will close the system so as to not lose operating water during the season.
- 11 Question: Aquatic drawings stated refer to civil drawings for color and finishes on splash pad area. No finish schedule in the civil for colors. Please advise if any coloring is added to concrete?
Response: See response to question 9 in this addendum.
- 12 Question: Is there any floor finish in the buildings? Please advise.
Response: The floors of all three buildings shall be finished per 132800-1.1. C.4.
- 13 Question: On page 1 of the Bid Form, Spec Section 004113, it lists two Total Bid spaces to be filled out. Is the first Total Bid space the total bid amount without the Contingency Allowance and the second Total Bid Space the total bid amount including the Contingency Allowance? Or, are both of the Total Bid spaces the project total including the allowance. Please clarify.
Response: The contractor shall fill out the lump sum line with the bid less the contingency allowance. The Total Bid line shall include the contingency allowance.
- 14 Question: On page 2 of the Bid Form, Spec Section 004113, it has a space to list No. of Days to Complete Alternate 1. Is this the number of days within the 8 months schedule? Is this additional days to the 8 months schedule? Would this extend the substantial completion time of 8 months? Please clarify what is meant by, "No. of Days to Complete Alternate 1."

Response: The contractor is to provide the number of days expected to complete the base bid and separately the number of days for Alternate 1. Adding those together would be the anticipated total project length to substantial completion if Alternate 1 is selected.

- 15 Question: On page 7 of the Bid Form, Spec Section 004113, it lists Electric twice, subcontractor categories 12 and 15. Please delete one of the Electric subcontractor categories from the list of Subcontractor Categories and revise the Bid Form.

Response: Revised Bid Form attached.

General Notes:

Watersplash Sub Request (Attached) - The substitution request is not accepted.

The primary reason for this rejection is because the equipment systems and construction quality are not equal to the original design. For example, the proposed substitution only offers minimum standards and utilizes polyurethane tanks, which we deem as inferior to what is currently designed. Using skid-mounted equipment and footings is not acceptable for a municipal application. Additionally, the drains and concrete encapsulations are not equivalent to what we have in our design.

It was unclear if the contractor proposed substituting the design team's engineered filtration system with the prefabricated package system included at the back of the substitution request. This all-in-one system is also rejected because these systems lack the longevity and quality associated with commercial grade systems.

Controlled Access Substitution Request (Attached) – The substitution request is acceptable. The product and manufacturer are still required to meet all specified requirements.

Samsung Split System Heat Pump and VRF Substitution Request (Attached) – The substitution requests are acceptable. The products and manufacturer are still required to meet all specified requirements.

Attachment (Updated Drawings, Updated Manual Pages, Updated Bid Form, Substitution Requests (3))

End Addendum Two

DRAWING AND SPECIFICATION CHANGES FOR ADDENDUM NUMBER 02



DATE: May 09, 2025
PROJECT NAME: Trap Pond State Park Splash Park
CONTRACT NUMBER: NAT24825-TPSPSPLASH

The following revisions and responses to questions are made to the original bid document. This addendum forms a part of the Contract Documents and modifies the original documents accordingly and as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

RESPONSES TO BIDDER QUESTIONS

- (1) Question: Per spec section 132800, prefabricated buildings 1.1.C.3 note exterior finish to have simulated cedar shingle and metal roofing. Please confirm which prefabricated buildings receive shingle and metal roofing, as there are discrepancies in roofing material types.

Response: Line 1.1-C3 shall read “Exterior Finish: Simulated board and batten siding with simulated metal roofing.” This is typical for all prefabricated buildings.

- (2) Question: What is the extent of the existing conditions on the site plan for site clearing? Please provide plans for existing conditions.

Response: Drawings C1.2 and C1.4 identify existing and proposed tree lines along the Limits of Disturbance. Drawing C1.6 delineates two areas within the larger LOD where trees are to remain and are protected with orange fencing – see highlighted C1.6 attached for reference. All other areas within the LOD are to be cleared.

- (3) Question: Addendum #1, 1.1C states that there is only one alternate for this project, and that is the addition of two additional splash pads. Spec 012300 schedule of alternates includes two additional restrooms, and in spec section 132800, there is an additional alternate to provide six single-user restrooms for building number 1. Please confirm that there is only one alternate, which is for adding two splash pads.

Response: Alternate #1 shall remain as specified in the original specifications and drawings dated March 28, 2025. Providing a larger Restroom Building is part of Alternate #1. A revised 00 41 13 - BID FORM specification has been attached with the revision clouded.

- (4) Question: On page 7 of the Bid Form, Spec Section 004113, it lists Electric twice, subcontractor categories 12 and 15. Please delete one of the Electric subcontractor categories from the list of Subcontractors Categories and revise the Bid Form.

Response: Category 15 has been deleted. A revised 00 41 13 – BID FORM specification has been attached with the revision clouded.

- (5) Question: Drawings are showing a main line 2" carbon filter installed after the water softener; however, I find no specs or information on the carbon filter in the project manual. Should I include a main line point of entry 2" carbon filter with my water treatment proposals of the general contractors?

Response: BOD for the carbon filter can be found in Note 14 on P1.1.

- (6) Question:

- 1) Is the concrete flatwork, including spray ground wet areas to be gray concrete or colored?
- 2) If to be colored, have these colors been selected, and if so what are they?
- 3) If they are to be colored, are the colors to be integral to the concrete, or stained?

Response: The concrete is not to be colored.

- (7) Question: On spray ground piping winterize, this is shown between the Aquatics and Civil drawings connected to the bottom of the sprayground wet area drains. There does not appear to be valves to close they system so as to not lose operating water in season. Can this be clarified and/or addressed?

Response: As part of the overall assembly, the manufacturer of the circulator drain shall include a plug that threads into the 4" F-NPT shown on Detail 3/SG-7.

- (8) Question: Is there any floor finish in the buildings?

Response: The floors of all three buildings shall be finished per 13 28 00 – 1.1.C.4.

- (9) Question: Can Water Splash equipment be substituted for the specified Water Play equipment?

Response: The substitution request is not accepted.

The primary reason for this rejection is because the equipment systems and construction quality are not equal to the original design. For example, the proposed substitution only offers minimum standards and utilizes polyurethane tanks, which we deem as inferior to what is currently designed. Using skid-mounted equipment and footings is not acceptable for a municipal application. Additionally, the drains and concrete encapsulations are not equivalent to what we have in our design.

It was unclear if the contractor proposed substituting the design team's engineered filtration system with the prefabricated package system included at the back of the substitution request. This all-in-one system is also rejected because these systems lack the longevity and quality associated with commercial grade systems.

- (10) Question: Can all-stainless-steel turnstiles by Controlled Access be substituted for the specified Hayward Turnstiles?

Response: The substitution request is acceptable. The product and manufacturer are still required to meet all specified requirements.

- (11) Question: Can Samsung be used for the Split System Heat Pumps and VRFs?

Response: The substitution requests are acceptable. The products and manufacturer are still required to meet all specified requirements.

REVISIONS TO SPECIFICATIONS

(1) Refer to Specification 00 41 13 – BID FORM

Replace Specification 00 41 13 – BID FORM with the attached specification. The following revisions have been made that generally includes stating that an enlarged Restroom Building is part of Alternate #1, and delete Subcontractor Category 15. The revisions have been clouded.

(2) Refer to Specification 10 14 00 – SIGNAGE

Replace Specification 10 14 00 – SIGNAGE with the attached specification. The following revisions have been made that generally include adding Informational Signs, Warning Signs, and sign post accessories. The revisions have been clouded.

(3) Refer to Specification 13 28 00 – PREFABRICATED CONCRETE BUILDING

Change Part 3, 1.1.C to read, “The Contractor will make final mechanical and electrical connections after the building is placed by manufacturer.”

Change Part 3, 1.2.A to read, “The Contractor shall provide adequate access and a level pad for the crane and semis to sit side by side under their own power. Working radius shall be 35 feet from center pin on crane.”

Change Part 3, 1.2.B to read, “The Contractor shall lay a foundation suitable for building to sit on. Foundation shall be level to within 1/4 inch.”

Change Part 3, 1.2.C to read, “The Contractor shall rough in mechanicals according to mechanical rough in drawing provided by building manufacturer. Mechanicals shall be terminated at top of foundation. Final mechanical connections shall be done by Contractor, including floor drains.

REVISIONS TO DRAWINGS

(1) NA

ATTACHMENTS

Specifications:

- 01 41 13 – BID FORM
- 10 14 00 – SIGNAGE

Drawings:

- Civil
 - Highlighted C1.6 – PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN to indicate two areas within the LOD where trees are to remain.

All other drawings, specifications, and terms remain as stated in the original documents. This addendum is hereby made a part of the Contract Documents, on which the contract is based and is intended to modify, explain, correct and/or add to the original Contract Documents.

END OF ADDENDUM

TRAP POND STATE PARK SPLASH PARK
TRAP POND STATE PARK
33587 BALD CYPRESS LANE, LAUREL, DE 19956
DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

BID FORM

For Bids Due: May 15, 2025 at 1:00pm To: Dept. of Natural Resources and Environmental Control
Division of Parks and Recreation
Office of Design and Development
89 Kings Highway, Dover DE 19901

Name of Bidder: _____

Delaware Business License No.: _____ Taxpayer ID No.: _____

(Other License Nos.): _____

Phone No.: () _____ - _____ Fax No.: () _____ - _____

The undersigned, representing that he has read and understands the Bidding Documents and that this bid is made in accordance therewith, that he has visited the site and has familiarized himself with the local conditions under which the Work is to be performed, and that his bid is based upon the materials, systems and equipment described in the Bidding Documents without exception, hereby proposes and agrees to provide all labor, materials, plant, equipment, supplies, transport and other facilities required to execute the work described by the aforesaid documents for the lump sum itemized below:

\$ _____

(\$ _____)

Contingency Allowance Twenty Thousand Dollars and Zero Cents (\$20,000.00)

Total Bid

\$ _____


(\$ _____)

TRAP POND STATE PARK SPLASH PARK
TRAP POND STATE PARK
33587 BALD CYPRESS LANE, LAUREL, DE 19956
DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

BID FORM

ALTERNATES

Alternate prices conform to applicable project specification section. Refer to specifications for a complete description of the following Alternates. An “ADD” or “DEDUCT” amount is indicated by the crossed-out part that does not apply.

ALTERNATE No. 1: The two (2) additional splash pads, associated equipment, additional pool deck, additional storm water management trenches, and enlarged Restroom Building. 

Add/Deduct: _____
(\$ _____)

No. of Days to Complete Alternate 1: _____

TRAP POND STATE PARK SPLASH PARK
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DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

BID FORM

UNIT PRICES

Unit prices conform to applicable project specification section. Refer to the specifications for a complete description of the following Unit Prices:

		DEDUCT	ADD
UNIT PRICE No. 1:	Additional Excavation	\$ _____	\$ _____
UNIT PRICE No. 2	Additional Tree and Brush Removal	\$ _____	\$ _____
UNIT PRICE No. 3	Additional Concrete Paving	\$ _____	\$ _____
UNIT PRICE No. 4	Additional Installation of Asphalt Roadway, Mill, and Overlay	\$ _____	\$ _____
UNIT PRICE No. 5	Additional Silt Fence	\$ _____	\$ _____
UNIT PRICE No. 6	Additional Composite Filter Log	\$ _____	\$ _____

TRAP POND STATE PARK SPLASH PARK
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BID FORM

I/We acknowledge Addendums numbered _____ and the price(s) submitted include any cost/schedule impact they may have.

This bid shall remain valid and cannot be withdrawn for thirty (30) days from the date of opening of bids (60 days for School Districts and Department of Education), and the undersigned shall abide by the Bid Security forfeiture provisions. Bid Security is attached to this Bid.

The Owner shall have the right to reject any or all bids, and to waive any informality or irregularity in any bid received.

This bid is based upon work being accomplished by the Sub-Contractors named on the list attached to this bid.

Should I/We be awarded this contract, I/We pledge to achieve substantial completion of all the work within _____ calendar days of the Notice to Proceed.

The undersigned represents and warrants that he has complied and shall comply with all requirements of local, state, and national laws; that no legal requirement has been or shall be violated in making or accepting this bid, in awarding the contract to him or in the prosecution of the work required; that the bid is legal and firm; that he has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken action in restraint of free competitive bidding.

Upon receipt of written notice of the acceptance of this Bid, the Bidder shall, within twenty (20) calendar days, execute the agreement in the required form and deliver the Contract Bonds, and Insurance Certificates, required by the Contract Documents.

I am / We are an Individual / a Partnership / a Corporation

By _____ Trading as _____
(Individual's / General Partner's / Corporate Name)

(State of Corporation)

Business Address: _____

TRAP POND STATE PARK SPLASH PARK
TRAP POND STATE PARK
33587 BALD CYPRESS LANE, LAUREL, DE 19956
DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

BID FORM

Witness: _____ **By:** _____
(*SEAL*) (Authorized Signature)

(Title)
Date: _____

ATTACHMENTS

- Sub-Contractor List
- Non-Collusion Statement
- Affidavit of Employee Drug Testing Program
- Affidavit of Contractor Qualifications
- Bid Security
- (Others as Required by Project Manuals)

TRAP POND STATE PARK SPLASH PARK
 TRAP POND STATE PARK
 33587 BALD CYPRESS LANE, LAUREL, DE 19956
 DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

BID FORM

SUBCONTRACTOR LIST

In accordance with Title 29, Chapter 69, Section 6962(d)(10)b of the Delaware Code, the following subcontractor listing must accompany any bid submittal. The bidder must list **in each category** the full name and address (City & State) of the sub-contractor that the bidder will be using to perform the work and provide material for that subcontractor category. Should the bidder’s listed subcontractor intend to provide any of their subcontractor category of work through a third-tier contractor, the bidder shall list that third-tier contractor’s full name and address (City & State). **If the bidder intends to perform any category of work itself, it must list its full name and address.** For clarification, if the bidder intends to perform the work themselves, the bidder **may not** insert “not applicable”, “N/A”, “self” or anything other than its own full name and address (City & State). To do so shall cause the bid to be rejected. In addition, the failure to produce a completed subcontractor list with the bid submittal shall cause the bid to be rejected. If you have more than three (3) third-tier contractors to report in any subcontractor category, print out additional page(s) containing the appropriate category, complete the rest of your list of third-tier contractors for that category, notate the addition in parentheses as (CONTINUATION) next to the subcontractor category and an asterisk (*) next to any additional third-tier contractors, and submit it with your bid.

	Subcontractor Category	Subcontractor	Address (City & State)	Subcontractors tax payer ID # or Delaware Business license #
1.	Sitework-A	_____	_____	_____
	Sitework-B	_____	_____	_____
	Sitework-C	_____	_____	_____
2.	Paving -A	_____	_____	_____
	Paving -B	_____	_____	_____
	Paving -C	_____	_____	_____
4.	Landscape-A	_____	_____	_____
	Landscape-B	_____	_____	_____
	Landscape-C	_____	_____	_____
8.	Concrete-A	_____	_____	_____

	Concrete-B			
	Concrete-C			
10.	Mechanical-A			
	Mechanical-B			
	Mechanical-C			
11.	Plumbing-A			
	Plumbing-B			
	Plumbing-C			
12.	Electric-A			
	Electric-B			
	Electric-C			
13.	Site Utilities-A			
	Site Utilities-B			
	Site Utilities-C			

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15. Not Used

16.	Fencing-A			
	Fencing-B			
	Fencing-C			

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17. Aquatics-A
 Aquatics-B
 Aquatics-C

16. Prefab Bldg-A
 Prefab Bldg-B

Trap Pond State Park

TRAP POND STATE PARK SPLASH PARK

March 28, 2025

Project Manual

Division of Parks and Recreation Contract No. NAT24825-TPSPSPLASH

Prefab Bldg-C



TRAP POND STATE PARK SPLASH PARK
TRAP POND STATE PARK
33587 BALD CYPRESS LANE, LAUREL, DE 19956
DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

BID FORM
NON-COLLUSION STATEMENT

This is to certify that the undersigned bidder has neither directly nor indirectly, entered into any agreement, participated in any collusion or otherwise taken any action in restraint of free competitive bidding in connection with this proposal submitted this date to the Division of Natural Resources and Environmental Control.

All the terms and conditions of Trap Pond State Park Splash Park – Contract No. NAT24825-TPSPSPLASH have been thoroughly examined and are understood.

NAME OF BIDDER: _____

**AUTHORIZED REPRESENTATIVE
(TYPED):** _____

**AUTHORIZED REPRESENTATIVE
(SIGNATURE):** _____

TITLE: _____

ADDRESS OF BIDDER: _____

E-MAIL: _____

PHONE NUMBER: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

TRAP POND STATE PARK SPLASH PARK
TRAP POND STATE PARK
33587 BALD CYPRESS LANE, LAUREL, DE 19956
DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

**AFFIDAVIT
OF
EMPLOYEE DRUG TESTING PROGRAM**

4104 Regulations for the Drug Testing of Contractor and Subcontractor Employees Working on Large Public Works Projects requires that Contractors and Subcontractors implement a program of mandatory drug testing for Employees who work on Large Public Works Contracts funded all or in part with public funds.

We hereby certify that we have in place or will implement during the entire term of the contract a Mandatory Drug Testing Program for our employees on the jobsite, including subcontractors, that complies with this regulation:

Contractor/Subcontractor Name: _____

Contractor/Subcontractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____ . NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

TRAP POND STATE PARK SPLASH PARK
TRAP POND STATE PARK
33587 BALD CYPRESS LANE, LAUREL, DE 19956
DIVISION OF PARKS AND RECREATION CONTRACT No. NAT24825-TPSPSPLASH

**AFFIDAVIT
OF
CONTRACTOR QUALIFICATIONS**

We hereby certify that we will abide by the contractor's qualifications outlined in the construction bid specifications for the duration of the contract term.

In accordance with Title 29, Chapter 69, Section 6962(d)(10)b.3 of the Delaware Code, after a contract has been awarded the successful bidder shall not substitute another subcontractor whose name was submitted on the Subcontractor Form except for the reasons in the statute and not without written consent from the awarding agency. Failure to utilize the subcontractors on the list will subject the successful bidder to penalties as outlined in the General Requirements Section 5.2 of the contract.

Contractor Name: _____

Contractor Address: _____

Authorized Representative (typed or printed): _____

Authorized Representative (signature): _____

Title: _____

Sworn to and Subscribed before me this _____ day of _____ 20____.

My Commission expires _____. NOTARY PUBLIC _____.

THIS PAGE MUST BE SIGNED AND NOTARIZED FOR YOUR BID TO BE CONSIDERED.

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SECTION 10 14 00 - SIGNAGE

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Room and door signs.

B. Informational signs

C. Warning signs.



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1.2 SUBMITTALS

- A. Product Data: Manufacturer's printed product literature for each type of sign, indicating sign styles, font, foreground and background colors, locations, overall dimensions of each sign.
- B. Signage Schedule: Provide information sufficient to completely define each sign for fabrication, including room number, room name, other text to be applied, sign and letter sizes, fonts, and colors.
- C. Samples: Submit two samples of each type of sign, of size similar to that required for project, illustrating sign style, font, and method of attachment.
- D. Selection Samples: Where colors are not specified, submit two sets of color selection charts or chips.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.4 RELATED SECTIONS

- A. See Aquatics drawings for additional signage types and requirements



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PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Flat Signs:

- 1. Best Sign Systems, Inc: www.bestsigns.com/#sle.
- 2. Cosco Industries (ADA signs): www.coscoarchitecturalsigns.com/#sle.

3. FASTSIGNS: www.fastsigns.com/#sle.

4. Inpro: www.inprocorp.com/#sle.

2.2 SIGNAGE APPLICATIONS

A. Accessibility Compliance: Signs are required to comply with ADA Standards and ICC A117.1 and applicable building codes, unless otherwise indicated; in the event of conflicting requirements, comply with the most comprehensive and specific requirements.

B. Room and Door Signs: Provide a sign for every doorway, whether it has a door or not, not including corridors, lobbies, and similar open areas.

1. Sign Type: Flat signs with injection molded panel media as specified.

2. Sign Height: 6 inches, unless otherwise indicated.

3. Rest Rooms: Identify with pictograms, room numbers to be determined later, and braille.

C. Informational Signs: Provide one informational sign per item below.

1. Hours of Operation Sign

a. Sign Type: Flat sign with painted panel media as specified.

b. Material: Heavy gauge aluminum, powder coated on all exposed surfaces.

c. Size: 14 inches x 16 inches

d. Mounting: Post mounted.

e. Media: Determine hours of operation with Owner. Include "UNAUTHORIZED USE OF THE AQUATIC FACILITY OUTSIDE THESE HOURS IS PROHIBITED" at the bottom of the sign.

f. Location: Entrance

2. First Aid Sign

a. Sign Type: Outside corner bent sign with painted panel media as specified.

b. Material: Heavy gauge aluminum, powder coated on all exposed surfaces.

c. Mounting: Standoff mounted to exterior corner of building.

- d. Media: Include "FIRST AID" designation and pictograph on both faces.
 - e. Location: Corner of Ticket Kiosk Building.
 - 3. Emergency Telephone Sign
 - a. Sign Type: Flat sign with painted panel media.
 - b. Material: Heavy gauge aluminum, powder coated on each face
 - c. Mounting: Concealed screws.
 - d. Location: Adjacent to emergency telephone identified on drawings.
 - 4. Management Contact Sign:
 - a. Sign Type: Flat sign with painted media as specified.
 - b. Material: Heavy gauge aluminum, powder coated on all exposed surfaces.
 - c. Mounting: Concealed screws.
 - d. Media: Determine management contact information with Owner.
 - e. Location: Ticket Kiosk Building.
- D. Warning Signs: Provide two of the following Warning Signs.
 - 1. Lifeguard Warning Sign
 - a. Sign Type: Flat sign with painted media as specified.
 - b. Material: Heavy gauge aluminum, powder coated on all exposed surfaces.
 - c. Mounting: Post mounted.
 - d. Media: "WARNING NO LIFEGUARD ON DUTY" in letters at least four inches high along with "CHILDREN UNDER THE AGE OF SIXTEEN SHOULD BE ACCOMPANIED BY A PARENT OR GUARDIAN" in letters at least one inch high.
 - e. Size: As appropriate to accomodate media.
 - f. Location: Locate one sign at the entrance. Locate the second sign within the pool deck area.

2.3 SIGN TYPES

A. Flat Signs: Signage media without frame.

1. Corners: Square.

2. Wall Mounting of One-Sided Signs: Concealed screws or as specified for the individual signs.

2

B. Color and Font: Unless otherwise indicated:

1. Character Font: Helvetica, Arial, or other sans serif font.

2. Background Color: To be selected by Engineer from manufacturer's full range.

3. Character Color: Contrasting color to be selected by Engineer from manufacturer's full range.

2.4 TACTILE SIGNAGE MEDIA

A. Injection Molded Panels: One-piece acrylic plastic, with raised letters and braille.

2.5 ACCESSORIES

A. Concealed Screws: Stainless steel, galvanized steel, chrome plated, or other non-corroding metal.

B. Sign Posts: 1-1/2 inch square, galvanized steel, with round surface-mounted base, post with holes 1 inch on center, and bolts as required for complete installation.

1. Mounting: Surface mounted. Provide anchors as required to install into concrete slab.

2. Finish: Powder coat. Color to be selected by Architect.

3. Height: Provide posts such that the top of signs are 48 inches above finish floor.

4. Exposed Screws: Screws used to attach signs to posts shall be chrome plated.

2

PART 3 EXECUTION

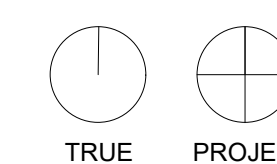
3.1 EXAMINATION

A. Verify that substrate surfaces are ready to receive work.

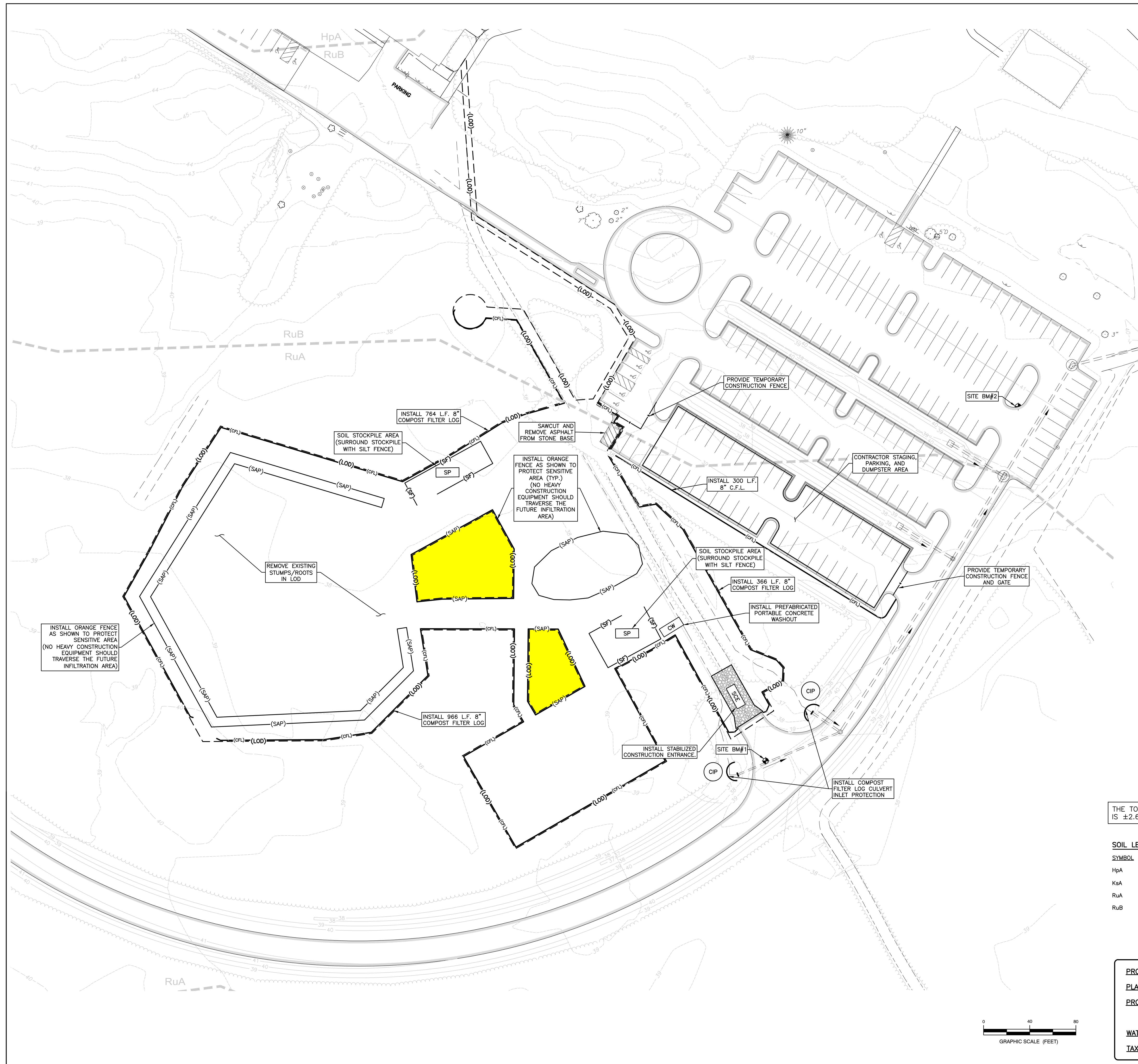
3.2 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install neatly, with horizontal edges level.
- C. Locate signs and mount at heights indicated on drawings and in accordance with ADA Standards and ICC A117.1.

END OF SECTION 10 14 00



KEYNOTES LISTED ON THIS SHEET ARE FOR CONVENIENCE ONLY. REFER TO SHEET CS.2 FOR COMPLETE LIST



LEGEND

EXISTING	PROPOSED
— (dashed)	PROPERTY LINE N/A
— (solid)	BUILDING N/A
— (dashed)	ASPHALT N/A
— (dotted)	CONTOURS N/A
— (dashed)	TREE LINE N/A
— (dashed)	STORM SEWER PIPE N/A
— (dashed)	DITCH CENTERLINE N/A
— (dashed)	SOIL LINE AND TYPE N/A
— (dashed)	LIMIT OF DISTURBANCE — (LOD) —

EROSION & SEDIMENT CONTROL LEGEND

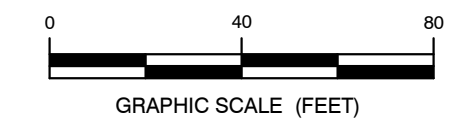
○ (CIP)	CULVERT INLET PROTECTION
□ (SCE)	STABILIZED CONSTRUCTION ENTRANCE
□ (SP)	SOIL STOCKPILE
— (CFL)	COMPOSITE FILTER LOG
— (SF)	SILT FENCE
— (SAP)	SENSITIVE AREA PROTECTION
□ (CW)	CONCRETE WASHOUT

*NOTE: IF THE LOCATION OF THE CONCRETE WASHOUT, DUMPSTER OR STAGING AREAS ARE TO BE MOVED, IT SHALL BE APPROVED IN WRITING BY THE AGENCY CONSTRUCTION SITE REVIEWER.

THE TOTAL LAND DISTURBANCE PROPOSED BY THIS PLAN IS ±2.65 ACRES.

SOIL LEGEND:

SYMBOL	MAP UNIT NAME	HSG
HpA	HANLOPEN LOAMY SAND, 0-2% SLOPES	A
KsA	KLEJ LOAMY SAND, 0-2% SLOPES	A/D
RuA	RUNCLINT LOAMY SAND, 0-2% SLOPES	A
RuB	RUNCLINT LOAMY SAND, 2-5% SLOPES	A



PROJECT NAME: TRAP POND SPLASH PARK
PLAN SET: SEDIMENT & STORMWATER MANAGEMENT PLAN
PROJECT LOCATION: 15554 HICKORY ROAD
 LAUREL, DE 19956
 SUSSEX COUNTY, DELAWARE
WATERSHED: BROAD CREEK
TAX PARCEL No. 332-6.00-1.00

BID SET



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Revisions:

No.	Date	Description
0	11/15/24	FIRE MARSHAL REVIEW
1	01/08/25	REVISE PER DNREC'S COMMENTS
2	02/07/25	REVISE PER DNREC'S COMMENTS

TRAP POND SPLASH PARK

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

Job No.	#19042	J. HARJANTO	Drawn
Scale	1" = 40'	D. BOWER	Checked
Date	03/28/2025	D. BOWER	Approved
Drawing Title	PRE-CONSTRUCTION SITE STORMWATER MANAGEMENT PLAN		Drawing Number
			C1.6



SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase)

Project: TRAP PONDS STATE PARK SPLASH PARK Substitution Request Number: _____
 From: STEPHEN BALICO / CONTROLLED ACCESS
 To: MARVIN ONIRO Date: 05/05/2025
KEELE BROTHERS A/E Project Number: _____
 Re: PENDING QUOTE REQUEST - SPLASH PARK Contract For: _____

Specification Title: PEDESTRIAN CONTROL EQUIPMENT Description: WAIST HIGH TURNSTILES
 Section: 11 14 00 Page: 1 Article/Paragraph: 1.1

Proposed Substitution: ALL STAINLESS TURNSTILE DUE TO WEATHER CONDITIONS
 Manufacturer: CONTROLLED ACCESS Address: 1535 INDUSTRIAL PARKWAY S Phone: 800-942-0829
 Trade Name: FASTPASS SERIES Model No.: FP 500 TRAPDS / AAA
 Installer: TO BE ADVISED Address: _____ Phone: _____

History: New product 1-4 years old 5-10 years old More than 10 years old

Differences between proposed substitution and specified product: OUR CABINET TOP IS STAINLESS
to STAINLESS

Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item: OUR UNITS ARE MADE WITH STAINLESS
TOPS

Similar Installation: SEVERAL
 Project: _____ Architect: _____
 Address: _____ Owner: _____
 Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____ days.

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____



SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase)

Project: _____ Substitution Request Number: _____

 From: _____
 To: _____ Date: _____

 A/E Project Number: _____
 Re: _____ Contract For: _____

Specification Title: _____ Description: _____
 Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
 Manufacturer: _____ Phone: _____
 Address: _____
 Trade Name: _____ Model No.: _____
 Installer: _____ Phone: _____
 Address: _____

History: New product 1-4 years old 5-10 years old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____
 Address: _____ Owner: _____
 _____ Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____ days.

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase — Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
 - Same warranty will be furnished for proposed substitution as for specified product.
 - Same maintenance service and source of replacement parts, as applicable, is available.
 - Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
 - Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
 - Proposed substitution does not affect dimensions and functional clearances.
 - Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
 - Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.
-

Submitted by: _____

Signed by: Luke Haskins _____

Firm: _____

Address: _____

Telephone: _____

Attachments:

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

Additional Comments: Contractor Subcontractor Supplier Manufacturer A/E
 Other:

Report

Project

Customer:

Project Name: Trap Pound State Park - Splash Park

Location: USA, Wilmington, DE

Date: 2025-05-02

Designer

Name:

Phone:

Email:

Address:

Software

Version: 2.0.1.33

DB version: 20250430-120005

Table of Abbreviations

Abbreviation	Description
Add. Ref.	Additional Refrigerant
AM	Airflow Mode
Block Load	Block Load
CM	Cooling Operation Mode
Corr. Capa	Correction Capacity
Corr. Pl	Correction Power Input
CR	Combination Ratio
DB	Dry Bulb Temperature
Des Temp	Design Temperature
Dis. Temp.	Discharge Temperature
Equip. Name	Equipment Name
EWT	Entering Water Temperature
FR	Flow Rate
HM	Heating Operation Mode
IDU	Indoor Unit
LWT	Leaving Water Temperature
Max. Capa	Maximum Capacity
Min. HOR	Minimum Heating Operation Ratio
ODU	Outdoor Unit
Op. WF Range	Operating Water Flow Range
Op. WT Range	Operating Water Temperature Range
Operating Temp. Range	Operating Temperature Range
PHE	Plate Heat Exchanger
Pipe Mat.	Piping Material
PL	Pressure Loss
PWL	Sound Power level
Ref. Pipe	Refrigerant Pipe
Rq. Vent. Vol.	Required Ventilation Volume
SHC	Sensible Heat Capacity
SPL	Sound Pressure Level
TC	Total Capacity
WB	Wet Bulb Temperature
47/43, 120	DB / WB, LWT (for DVM Chiller Heating capacity)

Equipment List of HPU-2

Type	Model Code	Description	Unit	Qty.	
ODU	AM036TXMDCH/AA	DVM S Eco, Heat Pump	EA	1	
IDU	AM005TNVDCH/AA	Wall-Mounted (WindFree)	EA	5	
	AM007TNVDCH/AA	Wall-Mounted (WindFree)	EA	1	
Pipe Mat.	MXJ-YA1509M	Y-joint	EA	5	
Controller	MWR-WG00UN	Wired remote controller	EA	6	
Add. Ref.	R410A	Refrigerant	lbs	5.92	
Type	Size	Length [ft] / Quantity [EA]			
		Liquid Pipe	Gas Pipe	H.P. Gas	Total
Ref. Pipe	6.35(1/4")	54.00	0.00	0.00	54.00
	9.52(3/8")	48.00	0.00	0.00	48.00
	12.7(1/2")	0.00	54.00	0.00	54.00
	15.88(5/8")	0.00	48.00	0.00	48.00

Controller Equipment List

Type	Model Code	Description	Unit	Qty.
Controller	MWR-WG00UN	Wired remote controller	EA	6
	MCM-A300BUN	Touch centralized controller	EA	1

Equipment List of HPU-2_ADD ALT

Type	Model Code	Description	Unit	Qty.	
ODU	AM048TXMDCH/AA	DVM S Eco, Heat Pump	EA	1	
IDU	AM005TNVDCH/AA	Wall-Mounted (WindFree)	EA	7	
	AM007TNVDCH/AA	Wall-Mounted (WindFree)	EA	1	
Pipe Mat.	MXJ-YA1509M	Y-joint	EA	7	
Controller	MWR-WG00UN	Wired remote controller	EA	8	
Add. Ref.	R410A	Refrigerant	lbs	7.29	
Type	Size	Length [ft] / Quantity [EA]			
		Liquid Pipe	Gas Pipe	H.P. Gas	Total
Ref. Pipe	6.35(1/4")	74.00	0.00	0.00	74.00
	9.52(3/8")	48.00	0.00	0.00	48.00
	12.7(1/2")	0.00	74.00	0.00	74.00
	15.88(5/8")	0.00	48.00	0.00	48.00

Controller Equipment List - ADD ALT

Type	Model Code	Description	Unit	Qty.
Controller	MWR-WG00UN	Wired remote controller	EA	8
	MCM-A300BUN	Touch centralized controller	EA	1

Piping

System (HPU-2)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°F]	95.0 / 78.0	0.0 / 0.0	75.0 / 63.0	70.0 / 58.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	HPU-2	AM036TXMDCH/AA
IDU	1F	-	FCU-2.3	AM005TNVDCH/AA
		-	FCU-2.2.6	AM005TNVDCH/AA
		-	FCU-2.4	AM007TNVDCH/AA
		-	FCU-2.2.2	AM005TNVDCH/AA
		-	FCU-2.5	AM005TNVDCH/AA
		-	FCU-2.1	AM005TNVDCH/AA

Outdoor Unit

Equipment Name	Model Code	Combination Ratio [%]	Des Temp [°F]	
			CM (IN WB)	HM (IN DB)
HPU-2	AM036TXMDCH/AA	85.53	63.00	70.00

* Des Temp : The sum of (Rated capacity ratios for each indoor unit * WB/DB temperatures for each indoor unit)

Max. Capa. [Btu/h]		Corr. Capa. [°F]		Power Input (Rated/Corrected) [°F]	
CM	HM	CM	HM	CM	HM
28622	31131	28622.00	31131.00	3.100/2.076	3.400/4.396

* Capacity Correction (VRF Only) based on Simultaneous Operating

* Corr. Capa. is a value calculated as simultaneous operating.

*** Corrected Power Input : Electrical wiring work shall fully comply with Installation Manual, Local / National Electrical regulations. Contact a Samsung expert for more information. Samsung Electronics is not responsible for any problems that may occur during use.**

Piping (Continued)

System (HPU-2) (Continued)

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°F]		Max. Capa. [Btu/h]			Corr. Capa. [Btu/h]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
FCU-2.3	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4383.00	3368.00	4834.00
FCU-2.2.6	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4383.00	3368.00	4834.00
FCU-2.4	AM007TNVDCH/AA	H	63.00	70.00	6772.00	5000.00	8111.00	6704.00	4949.00	6960.00
FCU-2.2.2	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4383.00	3368.00	4834.00
FCU-2.5	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4383.00	3368.00	4834.00
FCU-2.1	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4383.00	3368.00	4834.00

* Capacity Correction (VRF Only) based on Simultaneous Operating

* Corr. Capa. is a value calculated as simultaneous operating.

Accessory

Equip. Name	Model Code	Address				Accessory
		Main	RMC			
HPU-2	AM036TXMDCH/AA	-	-	-	-	
FCU-2.3	AM005TNVDCH/AA	-	-	-	-	
FCU-2.2.6	AM005TNVDCH/AA	-	-	-	-	
FCU-2.4	AM007TNVDCH/AA	-	-	-	-	
FCU-2.2.2	AM005TNVDCH/AA	-	-	-	-	
FCU-2.5	AM005TNVDCH/AA	-	-	-	-	
FCU-2.1	AM005TNVDCH/AA	-	-	-	-	

Combination Ratio

Model Code	CR [%]	Operation Mode	Min. HOR [%]	Block Load [Btu/h]([%]) / [%]		Corr. Capa. [Btu/h]	
				CM	HM	CM	HM
AM036TXMDCH/AA	85.53	HP	-	-	-	28622.00	31131.00

* Block Load (VRF Only) Option : Not Apply

* Capacity Correction (VRF Only) based on Simultaneous Operating

* Corr. Capa. is a value calculated as simultaneous operating.

System Check Result

Checklist	Restriction Value	Design Result

Piping (Continued)

System (HPU-2) (Continued)

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 65.94 ft (Restriction: 492.00 ft).	492.00 ft	65.94 ft
Total pipe length is 106.92 ft (Restriction: 984.25 ft).	984.25 ft	106.92 ft
Main pipe length is 28.00 ft (Restriction: 360.89 ft).	360.89 ft	28.00 ft
Pipe length from first Y-Joint to the farthest IDU is 37.94 ft (Restriction: 131.23 ft).	131.23 ft	37.94 ft
Height difference between ODU and IDU is 0.00 ft (restriction: 164.00 ft) (ODU higher than IDUs).	164.00 ft	0.00 ft
Height difference between ODU and IDU is 6.56 ft (restriction: 131.00 ft) (ODU lower than IDUs).	131.00 ft	6.56 ft
Height difference between IDUs when there is no wall mounts with EEV is 0.00 ft (restriction: 164.04 ft).	164.04 ft	0.00 ft
Height difference between IDUs when there are wall mounts with EEV is 0.00 ft (restriction: 98.43 ft).	98.43 ft	0.00 ft
Height difference between the lowest IDU and the highest wall mount with EEV is 0.00 ft (restriction: 49.21 ft).	49.21 ft	0.00 ft

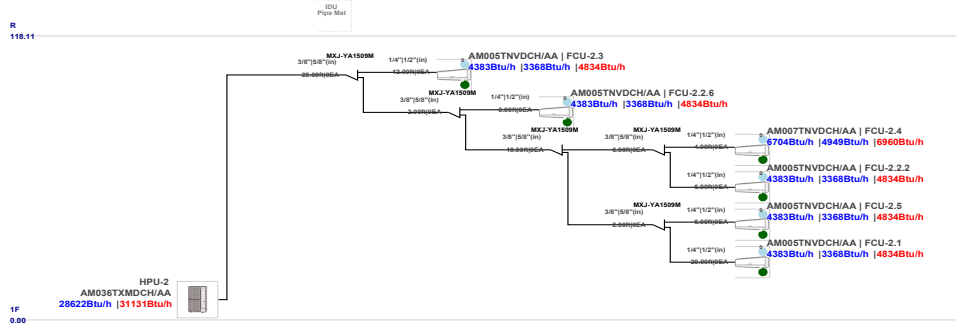
Refrigerant

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [lbs]
Factory Charging Refrigerant Amount	7.05
Additional Refrigerant Amount	5.92
Total	12.97

Piping (Continued)

System (HPU-2) (Continued)

Piping Diagram



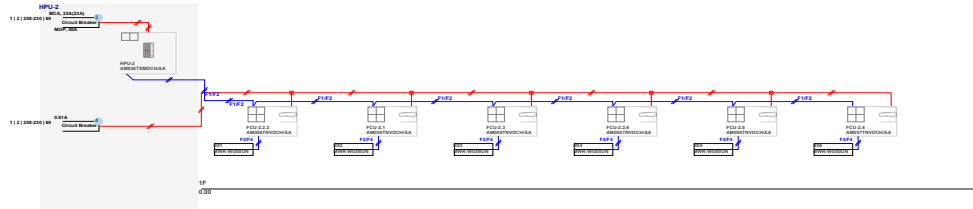
* Capacity Correction (VRF Only) based on Simultaneous Operating

-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Wiring

System (HPU-2)

Wiring Diagram



-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Piping (Continued)

System (HPU-2_ADD ALT)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°F]	95.0 / 78.0	0.0 / 0.0	75.0 / 63.0	70.0 / 58.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	HPU-2_ADD ALT	AM048TXMDCH/AA
IDU	1F	-	FCU-2.7	AM005TNVDCH/AA
		-	FCU-2.8	AM005TNVDCH/AA
		-	FCU-2.3	AM005TNVDCH/AA
		-	FCU-2.2.6	AM005TNVDCH/AA
		-	FCU-2.4	AM007TNVDCH/AA
		-	FCU-2.2.2	AM005TNVDCH/AA
		-	FCU-2.5	AM005TNVDCH/AA
		-	FCU-2.1	AM005TNVDCH/AA

Outdoor Unit

Equipment Name	Model Code	Combination Ratio [%]	Des Temp [°F]	
			CM (IN WB)	HM (IN DB)
HPU-2_ADD ALT	AM048TXMDCH/AA	88.54	63.00	70.00

* Des Temp : The sum of (Rated capacity ratios for each indoor unit * WB/DB temperatures for each indoor unit)

Max. Capa. [Btu/h]		Corr. Capa. [°F]		Power Input (Rated/Corrected) [°F]	
CM	HM	CM	HM	CM	HM
37319	39984	37319.00	39984.00	4.200/2.956	4.400/5.613

* Capacity Correction (VRF Only) based on Simultaneous Operating

* Corr. Capa. is a value calculated as simultaneous operating.

*** Corrected Power Input : Electrical wiring work shall fully comply with Installation Manual, Local / National Electrical regulations. Contact a Samsung expert for more information. Samsung Electronics is not responsible for any problems that may occur during use.**

Piping (Continued)

System (HPU-2_ADD ALT) (Continued)

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°F]		Max. Capa. [Btu/h]			Corr. Capa. [Btu/h]		
			CM	HM	CM		HM	CM		HM
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC
FCU-2.7	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4375.00	3361.00	4738.00
FCU-2.8	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4375.00	3361.00	4738.00
FCU-2.3	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4375.00	3361.00	4738.00
FCU-2.2.6	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4375.00	3361.00	4738.00
FCU-2.4	AM007TNVDCH/AA	H	63.00	70.00	6772.00	5000.00	8111.00	6692.00	4940.00	6821.00
FCU-2.2.2	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4375.00	3361.00	4738.00
FCU-2.5	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4375.00	3361.00	4738.00
FCU-2.1	AM005TNVDCH/AA	H	63.00	70.00	4428.00	3402.00	5633.00	4375.00	3361.00	4738.00

* Capacity Correction (VRF Only) based on Simultaneous Operating

* Corr. Capa. is a value calculated as simultaneous operating.

Accessory

Equip. Name	Model Code	Address				Accessory
		Main		RMC		
HPU-2_ADD ALT	AM048TXMDCH/AA	-	-	-	-	
FCU-2.7	AM005TNVDCH/AA	-	-	-	-	
FCU-2.8	AM005TNVDCH/AA	-	-	-	-	
FCU-2.3	AM005TNVDCH/AA	-	-	-	-	
FCU-2.2.6	AM005TNVDCH/AA	-	-	-	-	
FCU-2.4	AM007TNVDCH/AA	-	-	-	-	
FCU-2.2.2	AM005TNVDCH/AA	-	-	-	-	
FCU-2.5	AM005TNVDCH/AA	-	-	-	-	
FCU-2.1	AM005TNVDCH/AA	-	-	-	-	

Combination Ratio

Model Code	CR [%]	Operation Mode	Min. HOR [%]	Block Load [Btu/h]([%]) / [%]		Corr. Capa. [Btu/h]	
				CM	HM	CM	HM
AM048TXMDCH/AA	88.54	HP	-	-	-	37319.00	39984.00

* Block Load (VRF Only) Option : Not Apply

* Capacity Correction (VRF Only) based on Simultaneous Operating

* Corr. Capa. is a value calculated as simultaneous operating.

Piping (Continued)

System (HPU-2_ADD ALT) (Continued)

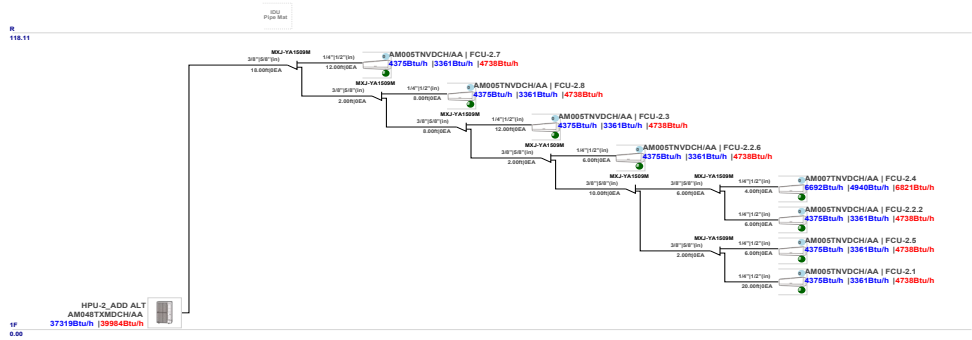
System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 67.91 ft (Restriction: 492.00 ft).	492.00 ft	67.91 ft
Total pipe length is 128.89 ft (Restriction: 984.25 ft).	984.25 ft	128.89 ft
Main pipe length is 18.00 ft (Restriction: 360.89 ft).	360.89 ft	18.00 ft
Pipe length from first Y-Joint to the farthest IDU is 49.91 ft (Restriction: 131.23 ft).	131.23 ft	49.91 ft
Height difference between ODU and IDU is 0.00 ft (restriction: 164.00 ft) (ODU higher than IDUs).	164.00 ft	0.00 ft
Height difference between ODU and IDU is 6.56 ft (restriction: 131.00 ft) (ODU lower than IDUs).	131.00 ft	6.56 ft
Height difference between IDUs when there is no wall mounts with EEV is 0.00 ft (restriction: 164.04 ft).	164.04 ft	0.00 ft
Height difference between IDUs when there are wall mounts with EEV is 0.00 ft (restriction: 98.43 ft).	98.43 ft	0.00 ft
Height difference between the lowest IDU and the highest wall mount with EEV is 0.00 ft (restriction: 49.21 ft).	49.21 ft	0.00 ft

Refrigerant

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [lbs]
Factory Charging Refrigerant Amount	7.05
Additional Refrigerant Amount	7.29
Total	14.34

Piping (Continued)
System (HPU-2_ADD ALT) (Continued)
Piping Diagram



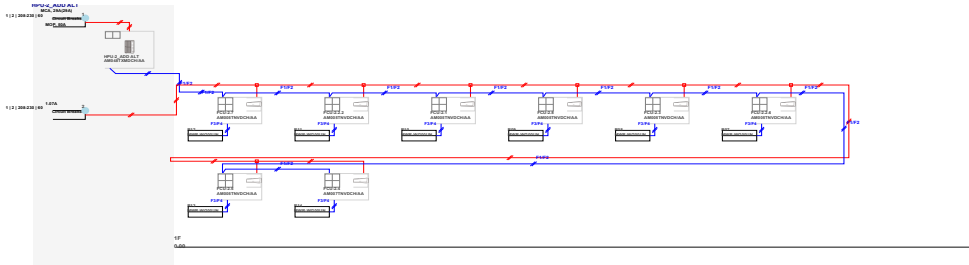
* Capacity Correction (VRF Only) based on Simultaneous Operating

-The above system configuration may differ from The actual installation conditions.
 Please refer to The installation manual for full details.

Wiring

System (HPU-2_ADD ALT)

Wiring Diagram



-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Samsung DVM S Eco Series, Heat Pump Condensing Unit

Job Name _____
 Purchaser _____ **HPU-2_Base Bid** _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

System Specifications

Performance ¹	US Ton (nominal)		3.0
	Capacity (Btu/h)	Nominal Cooling	38,000
		Nominal Heating	42,000
	System Modulation down to (Btu/h)		7,500
	SEER2	Ducted / Non-Ducted	16.5 / 22.0
	EER2	Ducted / Non-Ducted	11.2 / 12.5
HSPF2	Ducted / Non-Ducted	8.2 / 10.0	
Power	Voltage	(øV/Hz)	1 / 208-230 / 60
	Maximum Circuit Breaker (MCCB/ELB/ELCB)		40
	Minimum Circuit Ampacity (MCA)		23
Indoor Units	Total Capacity (%)		50 - 130% Of Outdoor Capacity
	Maximum Indoor Unit Quantity		8
Compressor	Type		Twin BLDC Rotary X1
	RLA	A	17.3
Refrigerant	Type		R410A
	Factory Charge	lbs.	7.1
Pipe Connections	Liquid X Suction		3/8 X 5/8
Installation Limitation ²	Max. Distance - ODU to IDU (feet)		492 (574 equivalent)
	Vertical Separation (feet)	ODU to IDU ³	164 / 131
		Highest/Lowest IDU	49
	Total Refrigerant Pipe (feet)		984
Condenser Fan	Fan	Type	Propeller X 2
		Output (CFM)	3,885
	Motor	Type	BLDC
Output (W) / FLA (A)		125 X 2 / 0.6	
Dimensions	W X H X D	Inches	37 X 47 5/8 X 13
	Weight	lbs.	216.1
Sound Level	Max. dB (A)	Cooling / Heating	50 / 52
Operating Temperature Range	Cooling ⁴	°F	0°F ~ 118°F (-18°C ~ 48°C)
	Heating	°F	-13°F ~ 75°F (-25°C ~ 24°C)
Accessories	Wind Baffles	Front	<input type="checkbox"/> WBF-1M2
		Back	<input type="checkbox"/> WBB-2M-B
	Wi-Fi Adapter		<input type="checkbox"/> MIM-H04UN
	Mode Selector Switch For HP Systems		<input type="checkbox"/> MCM-C200U
	Base Pan Heater Kit		<input type="checkbox"/> MHC-015EE
External contact control interface module (operation and error output, night silent mode manual activation)		<input type="checkbox"/> MIM-B14	
Safety Certifications			ETL (UL 1995)
Protection Devices	Intelligent logic to ensure proper operation within unit design limitations and operational parameters		
	High pressure sensor, low pressure sensor, over-voltage protection, compressor over-current protection, current transformer, fan motor voltage protection, fan motor thermal protection, high voltage fuses		



Compatibility

Only compatible with Samsung DVM S indoor units (AM****N***H****) and MCM-D211UN Universal Communication Kit.

Construction

The unit shall be galvanized steel with a baked on powder coated finish

Refrigerant pipe connections inside unit chassis with penetrations available on front, back, right, and bottom sides for versatile installation

Heat Exchanger

The heat exchanger shall be mechanically bonded fin to copper tube.

Salt spray test method: ASTM-B117-18 - the heat exchanger showed no unusual rust or corrosion development to 2,280 hours.

Controls

The unit shall be operated via NASA Protocol with controls provided by Samsung

Control wiring shall be 16 AWG X 2 shielded wire.

Refrigerant System

The compressors shall be Samsung hermetically sealed, inverter driven, twin BLDC Rotary type.

Refrigerant flow shall be controlled by EEV (electronic expansion valve) throughout the system.

A flat plate subcooler device will improve capacity at extreme system refrigerant pipe lengths and reduce refrigerant noise.

Other Features

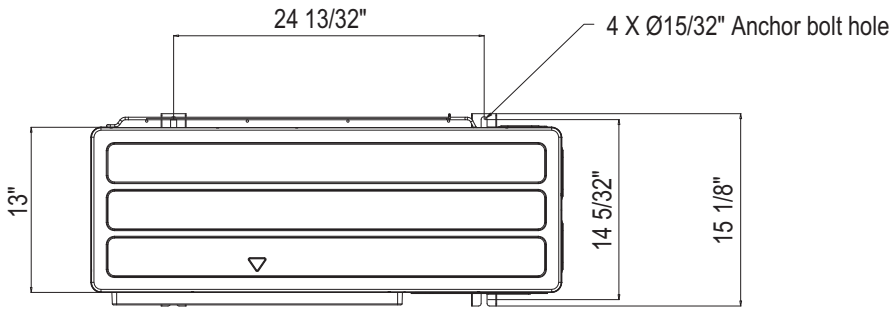
Optional night quiet modes to reduce outdoor unit sound

Optional snow blowing logic to prevent snow drifting on idle outdoor units

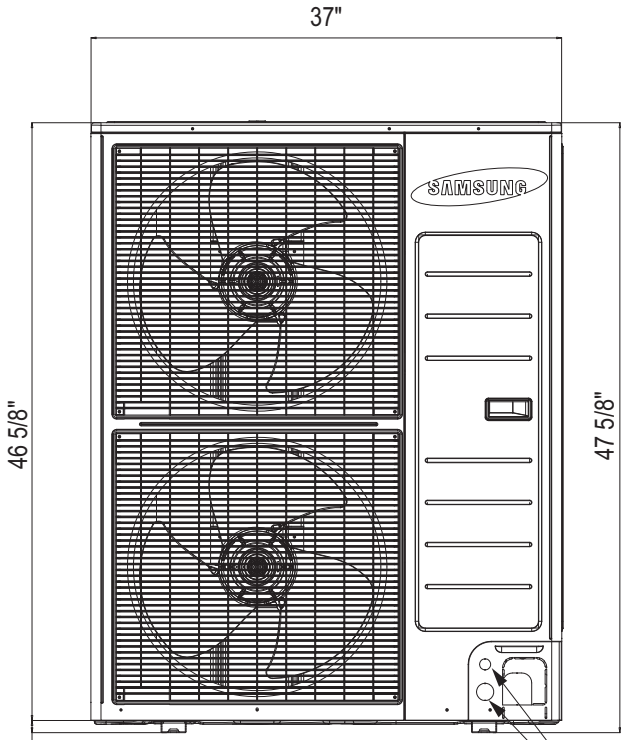
¹ Certified in accordance with AHRI 210/240 (2023). Effective January 1st, 2023.
² Other pipe restrictions and requirements exist. Please consult installation manuals or technical data book for full details.
³ Vertical separation: 131' when outdoor unit is lower than the indoor units, 164' when the outdoor unit is higher than the indoor units.
⁴ When cooling in outside temperatures between 0°F ~ 23°F, wind baffles are required. When outside temperature is between 0°F ~ 23°F, minimum 50% operating capacity should be maintained to ensure reliability while in cooling mode.

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit www.energystar.gov.

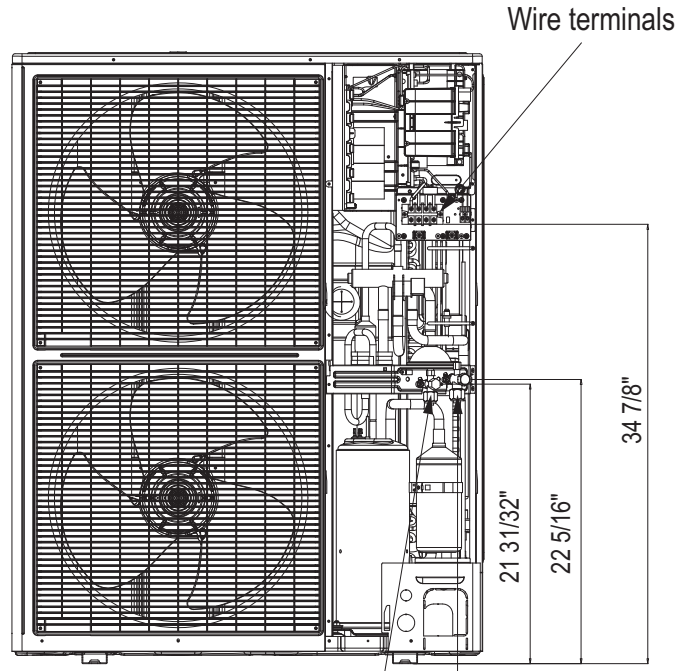




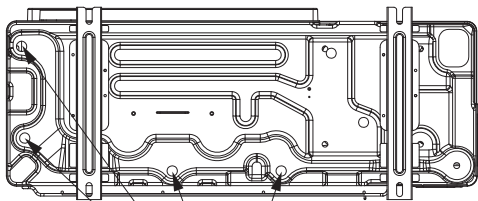
TOP



FRONT



FRONT (W/O PANEL)



BOTTOM

- ① Gas refrigerant pipe opening
- ② Liquid refrigerant pipe opening
- ③ Condensate drain holes
- ④ Communication conduit opening (2 X Ø1 3/8")

Samsung DVM S Eco Series, Heat Pump Condensing Unit

Job Name _____
 Purchaser _____ **HPU-2_ADD ALT** _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

System Specifications

Performance ¹	US Ton (nominal)		4.0	
	Capacity (Btu/h)	Nominal Cooling	48,000	
		Nominal Heating	54,000	
	System Modulation down to (Btu/h)			7,500
	SEER2	Ducted / Non-Ducted	17.5 / 20.5	
	EER2	Ducted / Non-Ducted	10.2 / 11.5	
HSPF2	Ducted / Non-Ducted	8.8 / 10.0		
Power	Voltage	(øV/Hz)	1 / 208-230 / 60	
	Maximum Circuit Breaker (MCCB/ELB/ELCB)		50	
	Minimum Circuit Ampacity (MCA)		29	
Indoor Units	Total Capacity (%)		50 - 130% Of Outdoor Capacity	
	Maximum Indoor Unit Quantity		9	
Compressor	Type		Twin BLDC Rotary X1	
	RLA	A	22.1	
Refrigerant	Type		R410A	
	Factory Charge	lbs.	7.1	
Pipe Connections	Liquid X Suction		3/8 X 5/8	
Installation Limitation ²	Max. Distance - ODU to IDU (feet)		492 (574 equivalent)	
	Vertical Separation (feet)	ODU to IDU ³	164 / 131	
		Highest/Lowest IDU	49	
	Total Refrigerant Pipe (feet)		984	
Condenser Fan	Fan	Type	Propeller X 2	
		Output (CFM)	3,885	
	Motor	Type	BLDC	
Output (W) / FLA (A)		125 X 2 / 0.6		
Dimensions	W X H X D	Inches	37 X 47 5/8 X 13	
	Weight	lbs.	216.1	
Sound Level	Max. dB (A)	Cooling / Heating	51 / 53	
Operating Temperature Range	Cooling ⁴	°F	0°F ~ 118°F (-18°C ~ 48°C)	
	Heating	°F	-13°F ~ 75°F (-25°C ~ 24°C)	
Accessories	Wind Baffles	Front	<input type="checkbox"/> WBF-1M2	
		Back	<input type="checkbox"/> WBB-2M-B	
	Wi-Fi Adapter		<input type="checkbox"/> MIM-H04UN	
	Mode Selector Switch For HP Systems		<input type="checkbox"/> MCM-C200U	
	Base Pan Heater Kit		<input type="checkbox"/> MHC-015EE	
	External contact control interface module (operation and error output, night silent mode manual activation)		<input type="checkbox"/> MIM-B14	
Safety Certifications			ETL (UL 1995)	
Protection Devices	Intelligent logic to ensure proper operation within unit design limitations and operational parameters			
	High pressure sensor, low pressure sensor, over-voltage protection, compressor over-current protection, current transformer, fan motor voltage protection, fan motor thermal protection, high voltage fuses			



Compatibility

Only compatible with Samsung DVM S indoor units (AM****N***H**) and MCM-D211UN Universal Communication Kit.

Construction

The unit shall be galvanized steel with a baked on powder coated finish

Refrigerant pipe connections inside unit chassis with penetrations available on front, back, right, and bottom sides for versatile installation

Heat Exchanger

The heat exchanger shall be mechanically bonded fin to copper tube.

Salt spray test method: ASTM-B117-18 - the heat exchanger showed no unusual rust or corrosion development to 2,280 hours.

Controls

The unit shall be operated via NASA Protocol with controls provided by Samsung

Control wiring shall be 16 AWG X 2 shielded wire.

Refrigerant System

The compressors shall be Samsung hermetically sealed, inverter driven, twin BLDC Rotary type.

Refrigerant flow shall be controlled by EEV (electronic expansion valve) throughout the system.

A flat plate subcooler device will improve capacity at extreme system refrigerant pipe lengths and reduce refrigerant noise.

Other Features

Optional night quiet modes to reduce outdoor unit sound

Optional snow blowing logic to prevent snow drifting on idle outdoor units

¹ Certified in accordance with AHRI 210/240 (2023). Effective January 1st, 2023.

² Other pipe restrictions and requirements exist. Please consult installation manuals or technical data book for full details.

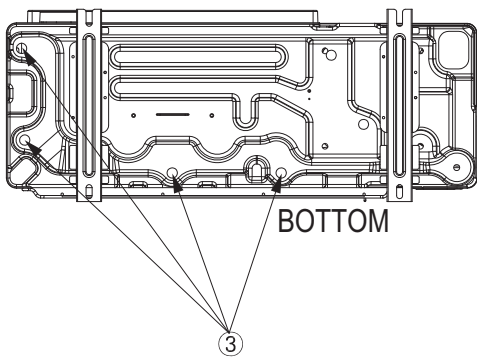
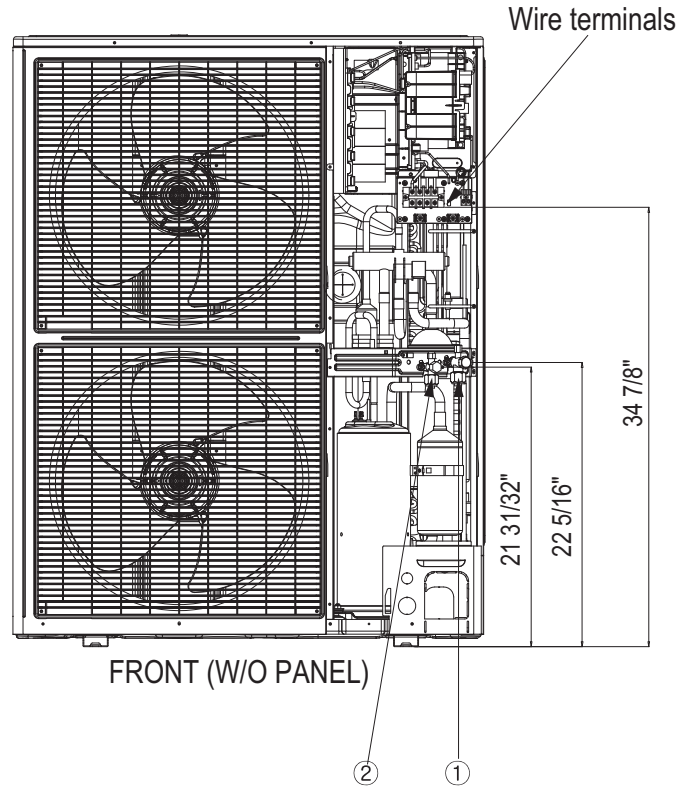
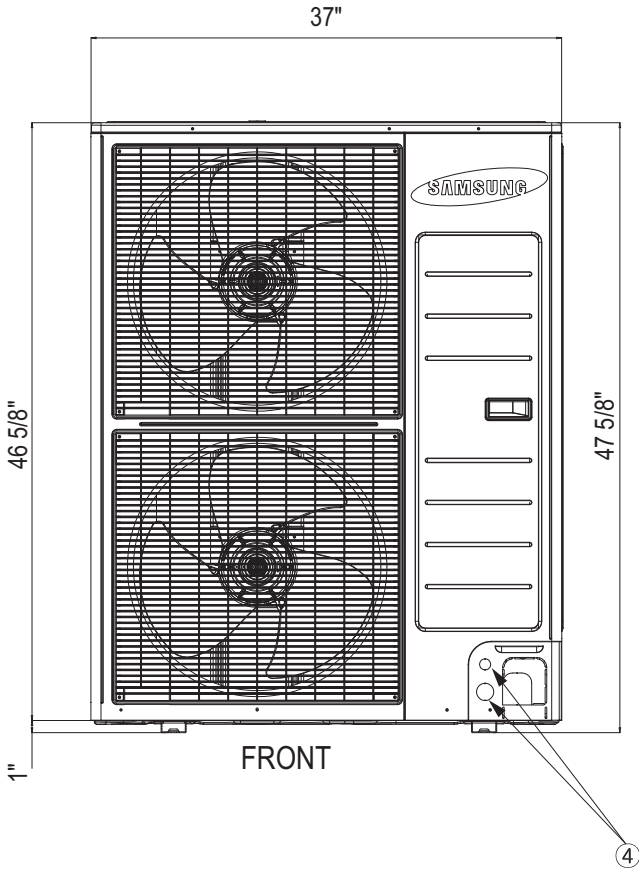
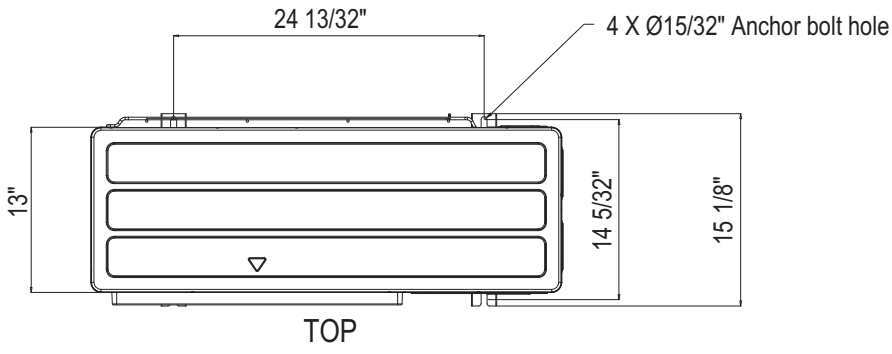
³ Vertical separation: 131' when outdoor unit is lower than the indoor units, 164' when the outdoor unit is higher than the indoor units.

⁴ When cooling in outside temperatures between 0°F ~ 23°F, wind baffles are required. When outside temperature is between 0°F ~ 23°F, minimum 50% operating capacity should be maintained to ensure reliability while in cooling mode.

Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit www.energystar.gov.



Samsung DVM S Eco Series, Heat Pump Condensing Unit
AM048TXMDCH/AA Dimensional Drawing



- ① Gas refrigerant pipe opening
- ② Liquid refrigerant pipe opening
- ③ Condensate drain holes
- ④ Communication conduit opening (2 X Ø1 3/8")

Samsung DVM S Series, Wind-Free™ Wall-Mounted Unit

Job Name _____ **FCU-2.1, 2.2, 2.3, 2.5, 2.6,**
 Purchaser _____
 Submitted to _____ **2.7_ADD ALT, 2.8_ADD ALT**
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

Specifications

Performance	Nominal Capacity ¹	Cooling (Btu/h)	5,000
		Heating (Btu/h)	5,800
Power	Voltage (ø/V/Hz)		1 / 208-230 / 60
	Nominal Running Current (A)		0.13
	MCA		0.16
	MOP		15
Fan	Type		Crossflow
	Motor	Type	BLDC (1)
		Output (W)	27
Airflow	CFM (UL)	L/M/H	145 / 159 / 173
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
Piping Connections	Liquid (flare)	Inches	1/4
	Suction (flare)	Inches	1/2
	Drain	Inches	ID 11/16 Hose
Unit Dimensions	W X H X D	Inches	32 5/16 X 11 3/4 X 8 7/16
	Weight	lbs.	19.8
Sound Level	L / M / H	dB(A)	27 / 30 / 31
Accessories	External Contact Control		<input type="checkbox"/> MIM-B14
	Condensate Pump	Aspen Mini Orange	<input checked="" type="checkbox"/> ASP-MO-UNIV 110-250
		Blue Diamond	<input type="checkbox"/> BD-BLUE230
	External Temperature Sensor		<input type="checkbox"/> MRW-TA
Safety Certifications		ETL (UL 1995)	



- Compatible with Samsung DVM S, DVM S Water, and DVM S Eco systems (AM*****AA).
- Electro-static, washable, pleated filters as standard (included with unit)
- 7-segment digital display on front of unit to display temperature and unit status
- High-voltage terminal block temperature sensor to disable unit in the event overheating of power connection.
- Wind-Free™ function will close the supply air outlet louver while in cooling mode to gently disperse cool air into the space without blowing directly onto occupants. The Wind-Free™ feature is optional and can be enabled using central or local control options (MWR-SH11UN, MWR-WE13UN, MWR-WG00*N, and AR-EH0*U only).

Construction

HIPS chassis certified to UL94 V0 with galvanized steel mounting bracket

Heat Exchanger

The heat exchanger shall be mechanically bonded fin to copper tube

Indoor Fan

Indoor fan is a single, antibacterial, crossflow type

Three fan speed settings and auto setting

Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls

The unit shall be operated via a wireless or wired remote control with DDC type signal

The unit shall integrate with the Samsung NASA Controls Network Solution

Controls shall integrate with a BMS system

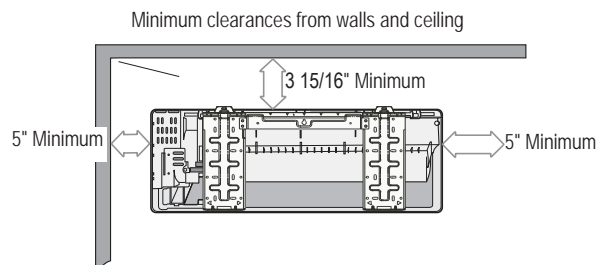
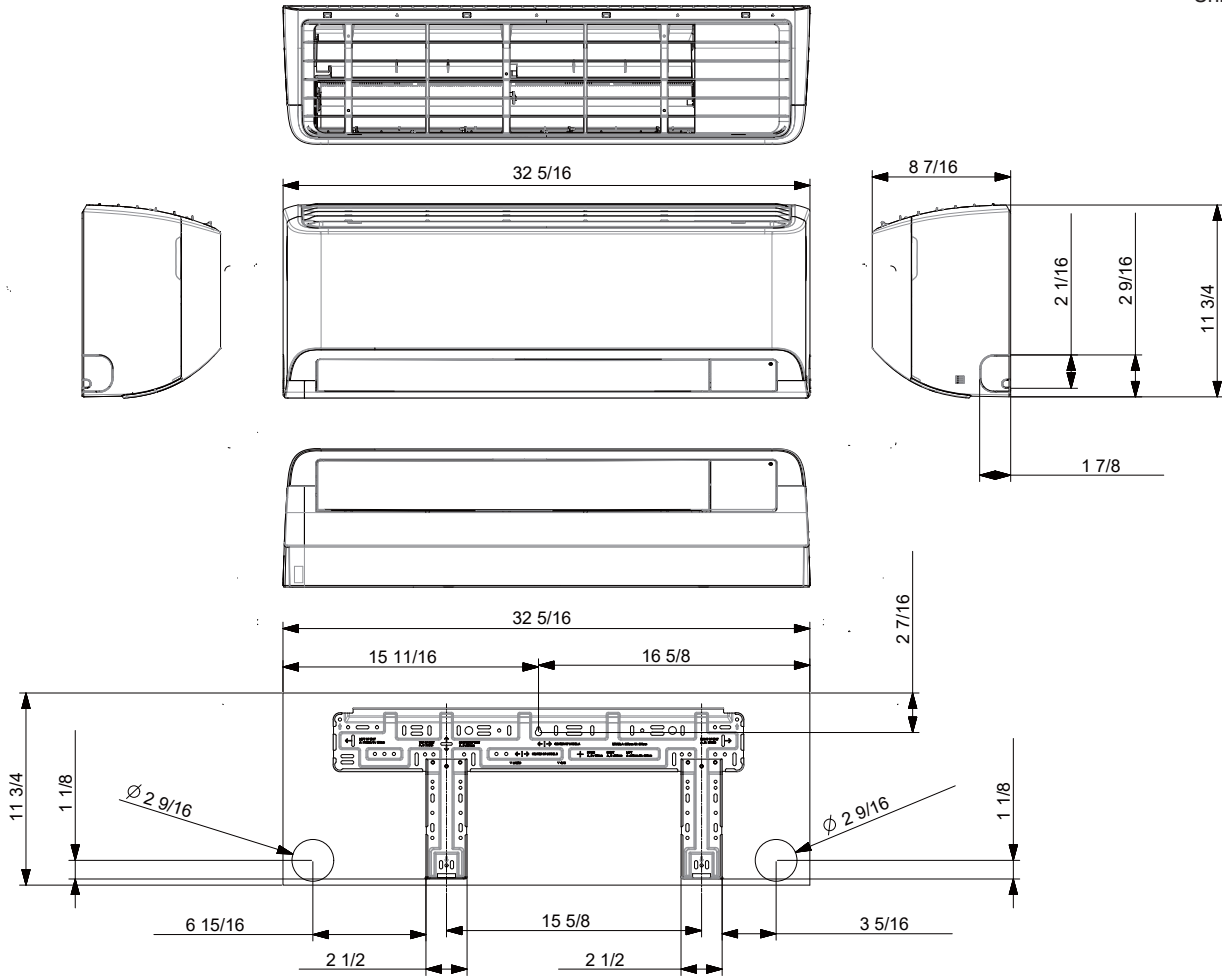
Control wiring shall be 2 X 16 AWG shielded wire

¹ Nominal cooling capacities are based on: Indoor temperature: 80°F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB
 Nominal heating capacities are based on: Indoor temperature: 70°F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

Unit: inches



Samsung DVM S Series, Wind-Free™ Wall-Mounted Unit

Job Name FCU-2.4
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

Specifications

Performance	Nominal Capacity ¹	Cooling (Btu/h)	7,500
		Heating (Btu/h)	8,500
Power	Voltage (ø/V/Hz)		1 / 208-230 / 60
	Nominal Running Current (A)		0.16
	MCA		0.20
	MOP		15
Fan	Type		Crossflow
	Motor	Type	BLDC (1)
		Output (W)	27
Airflow	CFM (UL)	L/M/H	159 / 177 / 201
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
Piping Connections	Liquid (flare)	Inches	1/4
	Suction (flare)	Inches	1/2
	Drain	Inches	ID 11/16 Hose
Unit Dimensions	W X H X D	Inches	32 5/16 X 11 3/4 X 8 7/16
	Weight	lbs.	19.8
Sound Level	L / M / H	dB(A)	30 / 32 / 34
Accessories	External Contact Control		<input type="checkbox"/> MIM-B14
	Condensate Pump	Aspen Mini Orange	<input checked="" type="checkbox"/> ASP-MO-UNIV 110-250
		Blue Diamond	<input type="checkbox"/> BD-BLUE230
	External Temperature Sensor		<input type="checkbox"/> MRW-TA
Safety Certifications		ETL (UL 1995)	



- Compatible with Samsung DVM S, DVM S Water, and DVM S Eco systems (AM*****AA).
- Electro-static, washable, pleated filters as standard (included with unit)
- 7-segment digital display on front of unit to display temperature and unit status
- High-voltage terminal block temperature sensor to disable unit in the event overheating of power connection.
- Wind-Free™ function will close the supply air outlet louver while in cooling mode to gently disperse cool air into the space without blowing directly onto occupants. The Wind-Free™ feature is optional and can be enabled using central or local control options (MWR-SH11UN, MWR-WE13UN, MWR-WG00*N, and AR-EH0*U only).

Construction

HIPS chassis certified to UL94 V0 with galvanized steel mounting bracket

Heat Exchanger

The heat exchanger shall be mechanically bonded fin to copper tube

Indoor Fan

Indoor fan is a single, antibacterial, crossflow type

Three fan speed settings and auto setting

Automatic (motorized) vertical swing (up/down) and horizontal swing (left/right) louvers

Controls

The unit shall be operated via a wireless or wired remote control with DDC type signal

The unit shall integrate with the Samsung NASA Controls Network Solution

Controls shall integrate with a BMS system

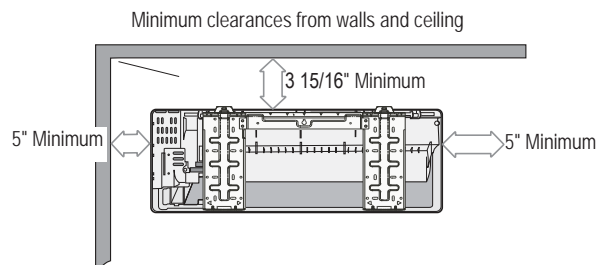
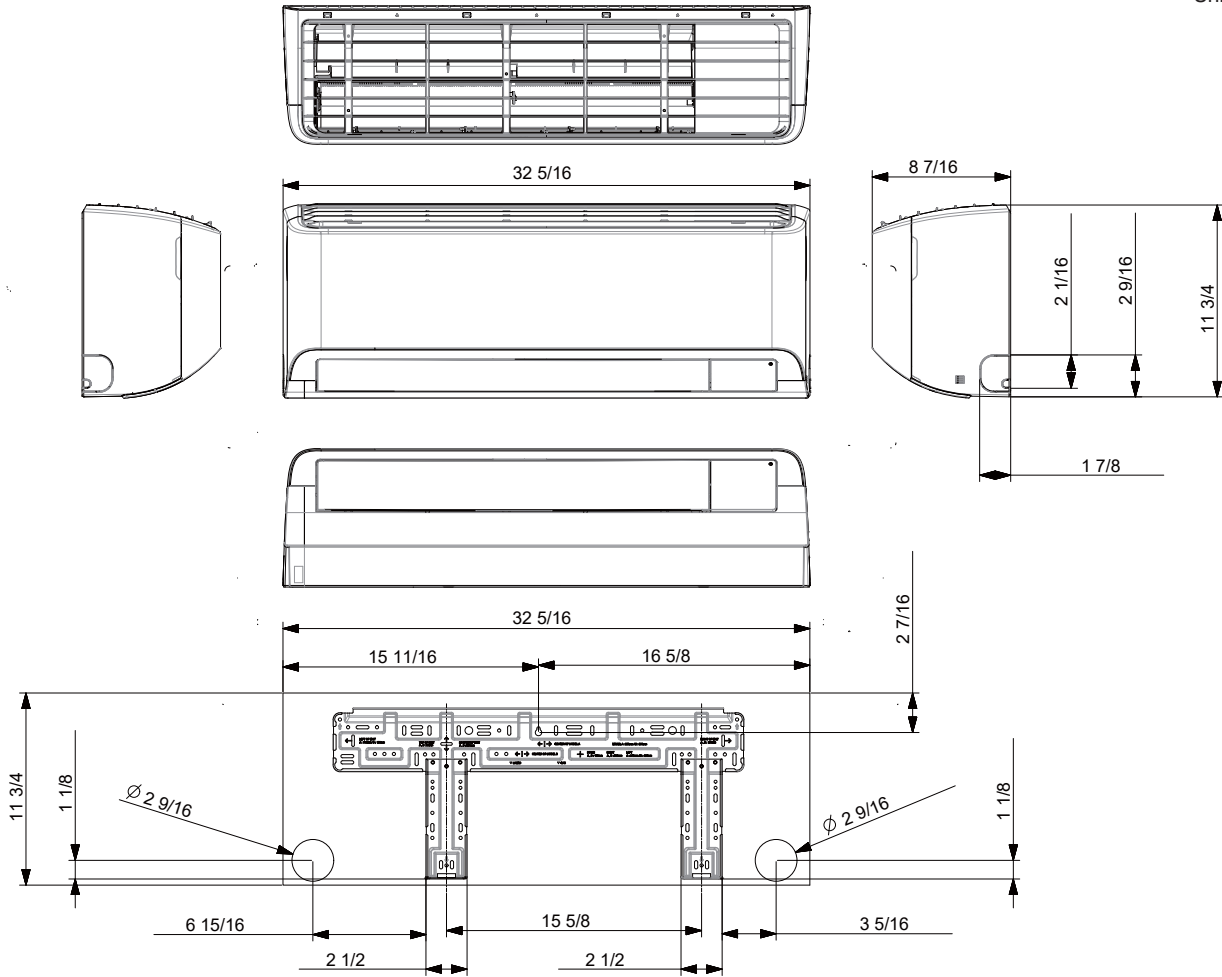
Control wiring shall be 2 X 16 AWG shielded wire

¹ Nominal cooling capacities are based on: Indoor temperature: 80°F DB, 67°F WB. Outdoor temperature: 95°F DB, 75°F WB
 Nominal heating capacities are based on: Indoor temperature: 70°F DB, 60°F WB. Outdoor temperature: 47°F DB, 43°F WB

*The Wind-Free™ unit delivers an air current that is under 0.15 m/s while in Wind-Free™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers).

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

Unit: inches



Samsung Advanced Wired Remote Controller

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

Features

Easy indoor unit control ¹

- Air handler operation ON/OFF
- Air handler operation mode, set temperature, air flow direction, fan speed
- Discharge air temperature setting (with supported indoor unit models)
- Filter replacement alarm display and reset
- Single indoor unit control or multiple unit control (maximum 16 units)
- Time synchronization with DMS2.5 gateways
- Dual Set Temperature (indoor unit firmware upgrade may be required ²)
- Advanced HP auto changeover control and configuration (indoor unit firmware upgrade may be required ²)
- Quiet and sleep modes
- Error display (up to 10 error codes with descriptions)

Energy saving operation ¹

- Upper/lower temperature restriction setting
- Occupied/unoccupied settings
- Setback function
- Energy saving operation mode
- Energy consumption monitoring and daily, weekly, monthly, and yearly energy consumption trending (for supported systems)
- Maximum current control for DVM S 3Ø outdoor units (AM****XV****AA), and CAC (AC0**BXADCH/AA) outdoor units.

Weekly operating schedule setting

- Weekly operating schedule
- Able to set desired A/C operation mode, setting temperature and fan speed to operate based on weekly schedules
- Able to apply schedule exception day

Other features ¹

- Color display screen
- Different button permission levels
- Supports multiple languages (English, Spanish, French, Portuguese)
- Partial button lock options (operation on/off, heat mode, cool mode, fan mode, dry mode, auto mode, set temperature, fan speed, scheduling, Wind-Free, Long-wind, quiet mode, and sleep mode buttons can be locked individually).
- Daylight savings clock advance option
- Temperature limit setting option
- Real-time clock function
- Built-in IR receiver for indoor unit control using a wireless controller and integral room temperature sensor
- Indoor unit operation state display
- Indoor unit service mode support
- Micro SD card slot for simple firmware updating
- Independent louver control for 4-Way and Mini 4-Way cassette units
- Airflow direction control for 360 Cassette indoor units. DVM S 360 Cassette units manufactured before 7/1/2016 will require a firmware update to use MWR-WG00UN. Contact Samsung HVAC technical support to obtain the firmware upgrade files. Firmware updating can be done using MIM-C02N communication converter/service tool.
- Adjustable heating temperature compensation values
- Wind-Free™ Control (applies to supported WindFree™ 1-Way, 4-Way, Mini 4-Way, and Wall-mounted indoor units).
- MDS (Motion Detection Sensor) Indirect/ Direct Control (applies to cassette units with optional MDS accessory (sold separately)).
- Long Reach Function (for applicable indoor unit models)
- Automatic air volume enable and status viewing (for Duct S models AM0**MNMDCH/AA, AM0**MNHDC/AA, AM0**RNMDCH/AA, and AC0***NHDCH/AA).

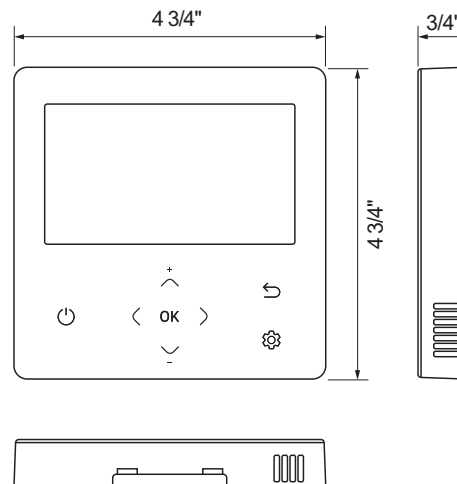
¹ Some features may not be available depending on the model of connected air handler(s)

² Firmware upgrade may be required for certain features. Refer to supporting technical bulletins at www.SamsungHVAC.com/downloads



Specifications*

- Compatible with Samsung DVM S Systems (AM*****AA, MCM-D211UN), and DVM Chiller FCU Kits (MIM-F00N), single zone wall-mounted systems (AR**T****WKNCV, AR**B****WKNCV), multi-zone systems (AJ0**TN*DCH/AA, AJ0**BN*DCH/AA), and single zone cassette, wall-mounted, and ducted systems (AC0***N****/AA)
- Can connect and control up to 16 indoor units on a single system or across multiple systems
- 2 Conductor connection
- DC 12V power supplied by indoor unit (consumption: 2W)
- PLC (power line communication) is done on F3/F4 terminals.
- Can sense temperature via internal sensor, temperature sensor inside indoor unit, or use the average temperature between controller and air handler temperature sensors



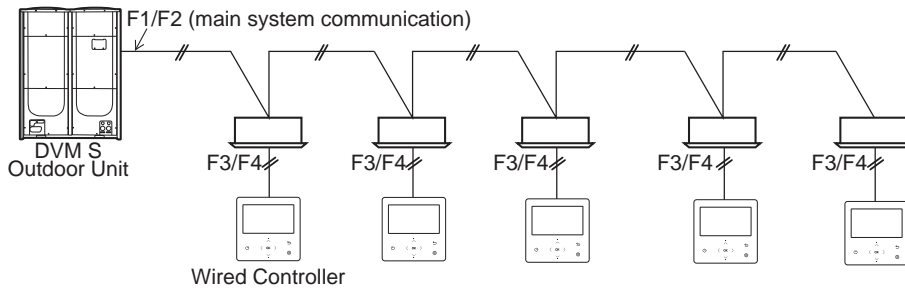
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www.SamsungHVAC.com

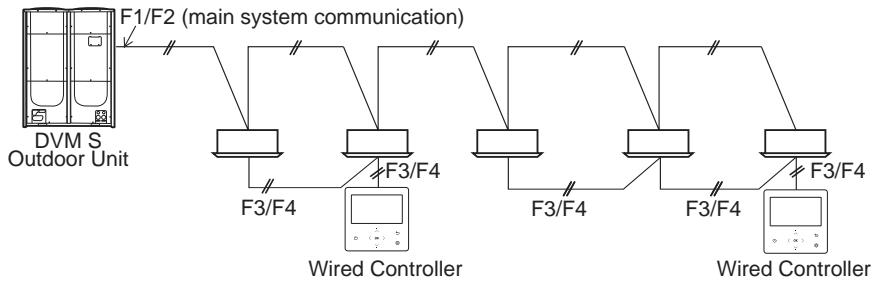
888-699-6067

Samsung Standard Wired Controller
Common Controller Configurations/Options

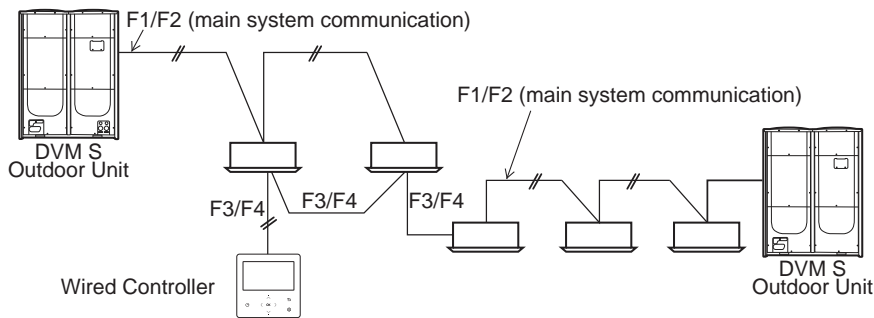
Individual control - 1 indoor unit with 1 wired control



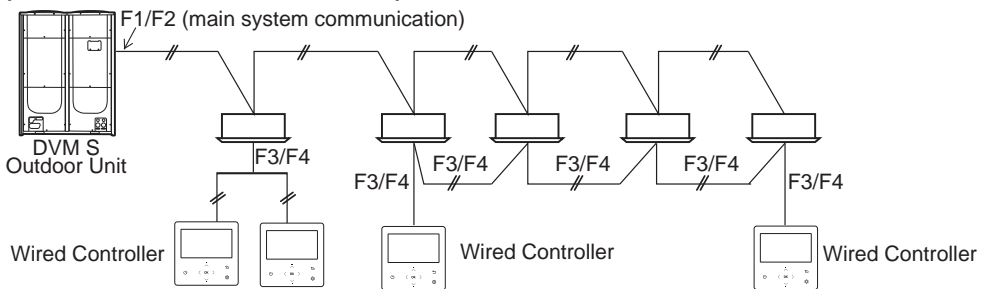
Group control - up to 16 indoor units on 1 wired controller



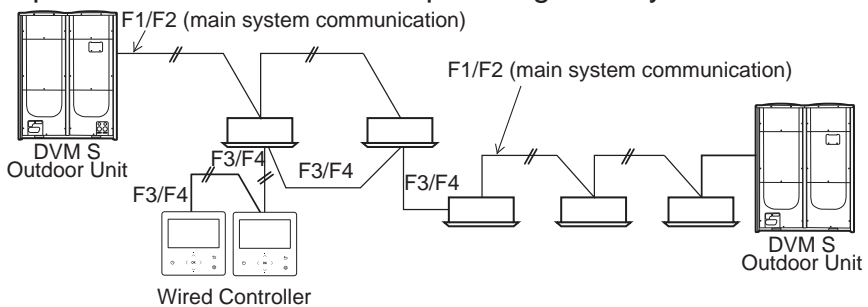
Group control - up to 16 indoor units on 1 wired controller on multiple refrigerant systems



Group control - control 1 or multiple indoor units with 2 wired controllers



Group control - up to 16 indoor units on multiple refrigerant systems with 2 wired controllers





SUBMITTAL DATA SHEET

Mini Orange Univolt

Mini-Split Condensate Pump Kit 100-230v
83909 (ASP-MO-UNI)

Project Information:

Job Name: _____

Location: _____

Engineer: _____

Submitted to: _____

For: Reference Approval Construction

Submitted by: _____

Reference: _____

Submittal Information:

Approval: _____

Date: _____

Construction: _____

Unit #: _____

Drawing #: _____

(Sec. I) Product Specifications:

Pump Length - 4.25"
Pump Width - 1.5"
Pump Height - 2"
Capacity - 2.9-3.2 GPH @ 0" Head / 1.6-1.8 GPH @ 33' Head
Max BTUs - 49,500
Max Head in Feet - 33
Max Temperature - 104F
Max Suction Lift - 5' Sound Level - 26dB(A)
Dry Contact Rating - 3A NC
Voltage - 100-230v
Amperes - .17
Watts - 16
Remote Reservoir - Y
Plenum Rated - N
Cable Length - 6"
Sound level and pump performance varies with voltage frequency.

Pump Selector & Wiring Diagrams Available at
<http://www.rectorseal.com/aspenspump.html>

Contact: RectorSeal® 2601 Spenwick Drive, Houston, TX P 713-263-8001 800-23 -3345 F 3-263-7577 -0051 W .rectorseal.com

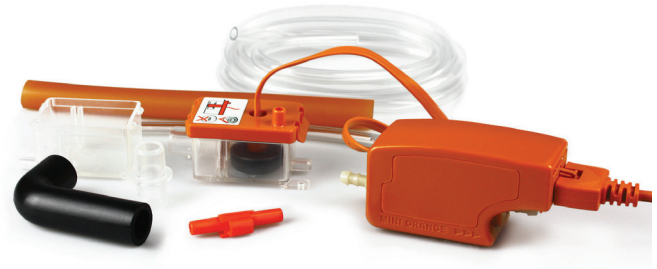
(Sec. II) Ordering Information:

Product Code - 83909
Model - ASPMOUNI
Carton Qty - 1
Carton Weight - 2

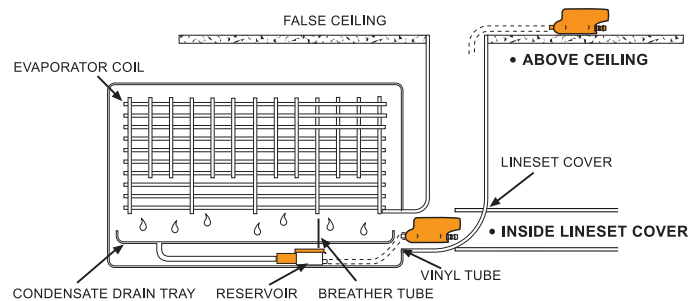
(Sec. III) Carton Contents:

Pump Assembly	Inline Fuse
Inline Reservoir	Cable Ties (6)
Submersible Reservoir	Self-Adhesive Velcro Strips (2)
5'x1/4" i.d. Vinyl Discharge Tube	8"x5/8" i.d. Inlet Tube
Modular 6' Power Cable	Installation Manual
6"x1/4" i.d. Vinyl Breather Tube	Anti-Siphon (1)
Drain Hose Adaptor	90° Elbow

(Fig. I) Product Image:



(Fig. II) Typical Pump Locations:

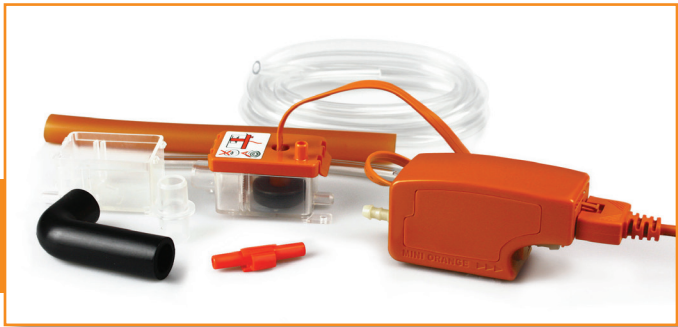


(RectorSeal's products are subject to continuous improvements; RectorSeal reserves the right to modify product design, specifications & information in this data sheet without notice and without incurring any obligations)

ASPEN® is a registered trademark of Aspen Oldco Limited Company UK

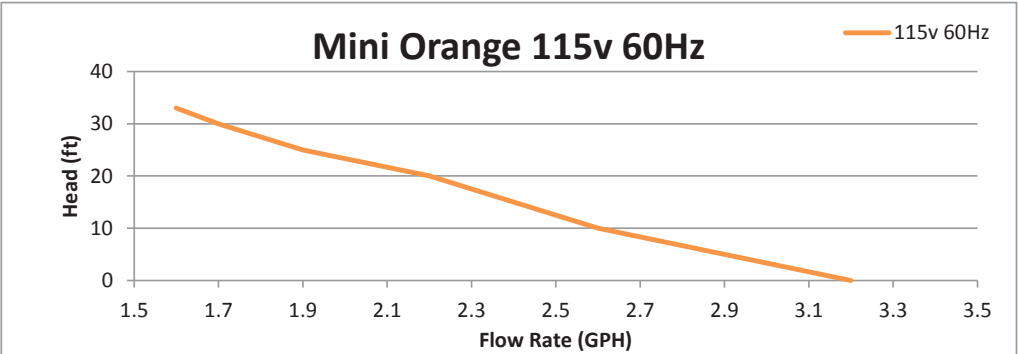
Mini Orange Univolt

Mini-Split Condensate Pump Kit 100-230v
83909 (ASP-MO-UNI)

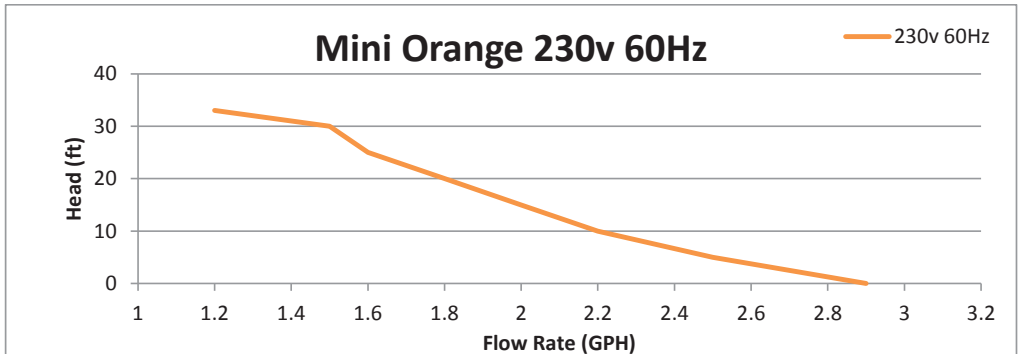


Aspen Pump BTU Calculator

Mini Orange 115v 60Hz		
Head	GPH	BTU
0	3.2	54600
5	2.9	49500
10	2.6	44350
15	2.4	42000
20	2.2	37500
25	1.9	33250
30	1.7	29250
33	1.6	27500



Mini Orange 230v 60Hz		
Head	GPH	BTU
0	2.9	49500
5	2.5	42600
10	2.2	37500
15	2	34000
20	1.8	30700
25	1.6	27500
30	1.5	25800
33	1.2	20600



Pump Selector & Wiring Diagrams Available at
<http://www.rectorseal.com/aspenpump.html>

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Contact: RectorSeal® 2601 Spenwick Drive, Houston, TX **P** 713-263-8001 | 800-231-3345 **F** 713-263-7577 | 800-441-0051 **W** www.rectorseal.com

SAMSUNG

Submittal Data

MCM-A300BUN

Touch Central Control 2.0

Job name: _____

Purchaser: _____

Submitted to: _____

Unit designation: _____

Location: _____

Engineer: _____

Reference Approval Construction

Schedule #: _____

Features

- 10.1" touch LCD controller
- Two communication ports for better installation flexibility
- Can connect and control up to 32 systems (max. 2 X channel) and up to 128 indoor units, Samsung ERVs, and hydro units
- Local access via IP with a PC or tablet
- 2D floor plan and zone configuration capability for an intuitive control experience
- Allows creation of zones for indoor unit grouping with customizable zone icons
- 2 X digital input terminals for dry-contact connection to disable/enable all connected equipment (3 optional configuration settings)
- Energy trending and air quality monitoring (with compatible indoor units)
- Error and alarm history management
- Full indoor unit control along with system maximum current control (current restriction) and capacity correction settings.
- 2 X Digital Inputs (DI) for simple system shutdown and 2 X Digital Outputs to support notification when at least one indoor unit is on and error notification.
- SD card slot for data backup and future software updates
- Customizable wallpapers provide an enhanced aesthetic appearance

Convenience

- Scheduling (max. 50)
- All ON/OFF button
- Indoor unit operation mode, set temperature, fan speed, controller use/restriction enable/disable, louver control, water operating mode and temperature setting, temperature limits, discharge air temperature, filter reminder reset setting/checking, and special functions (Purify, Motion Detect Sensor, WindFree™, Long Wind, Indoor display ON/OFF, Clean, Sleep, Away).
- Cooling and heating temperature (desired temperature) limit setting
- Group/zone control
- Operation mode restriction setting
- Screen lock
- Restrict: ON/OFF, mode, set temperature, fan speed, advanced settings, and remote control use (basic indoor unit settings) for daily users
- Menu lock (restrict indoor unit control, schedule setting/changing, and controller settings for daily users)
- Option to group multiple indoor units to display as one indoor unit on user interface

Compatibility

- DVM S systems (AM*****AA), DVM Chiller (AG0*****AA), CAC 1:1 systems (AC0*****AA), and FJM multi-zone systems (AJ0*****AA) without additional hardware/adapters.
- RAC (AR*****AA) systems using a MIM-N01 communication interface module
- Fresh Access™ ERV units (AN***NSEDAA) using MXD-K200VN ERV kit at every ERV and 1 X MIM-N10 ERV interface module per 16 ERV Kits.
- FCU Kit (MIM-F00N) using one MIM-F10N FCU kit interface module per 16 FCU Kits.



Specifications

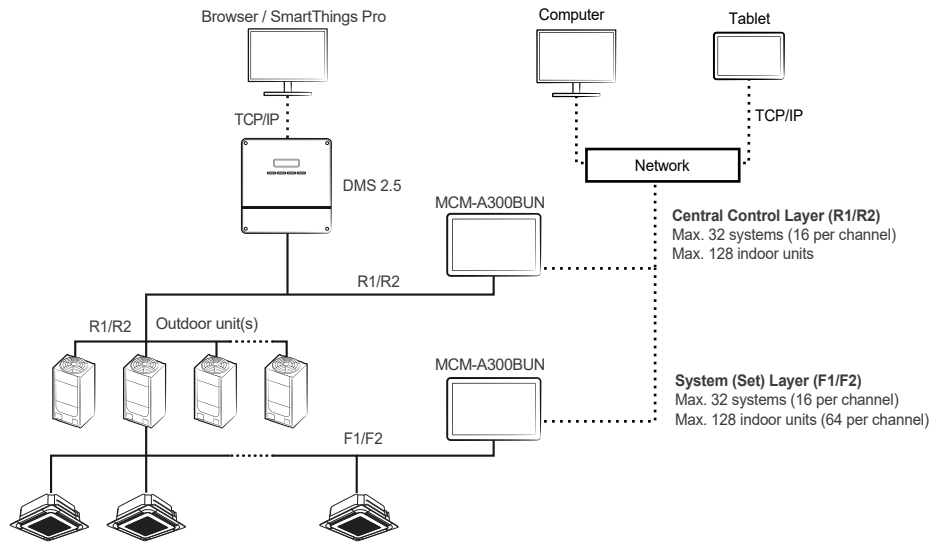
- The controller shall have two (2) communication ports that allows connection to the Central Control layer (R1/R2) or the System Control Layer (F1/F2).
- The controller supports connection up to 32 systems (max. 16 per port) when connected to the Central Control Layer (R1/R2) with maximum 128 indoor units total.
- The controller supports connection up to 2 systems (max. 1 per port) when connected to the System Control Layer (F1/F2) with maximum 128 indoor units total (max. 64 indoor units per channel).
- Power: 12VDC with included power supply (110 – 240VAC, 50/60Hz)
- RS485 communication
- Up to 16 X MCM-A300BUN controllers can connect together on R1/R2 or F1/F2 communication line
- 16 AWG X 2 shielded wire for communication wiring

Samsung HVAC maintains a policy of ongoing development. Specifications are subject to change without notice.

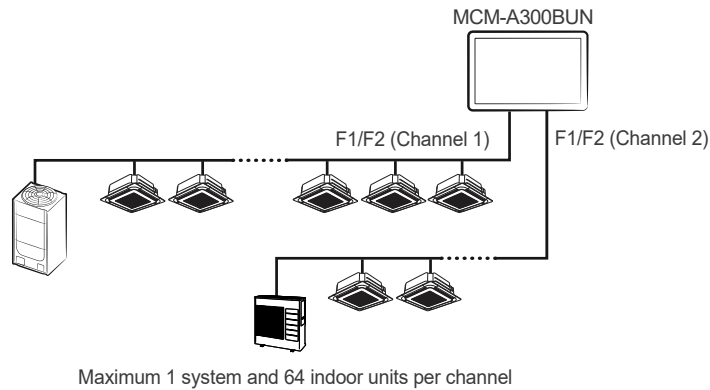
*The WindFree™ unit delivers an air current that is under 0.15 m/s while in WindFree™ mode. Air velocity that is below 0.15 m/s is considered "still air" as defined by ASHRAE (American Society of Heating, Refrigerating, and Air Conditioning Engineers).

Connection Examples

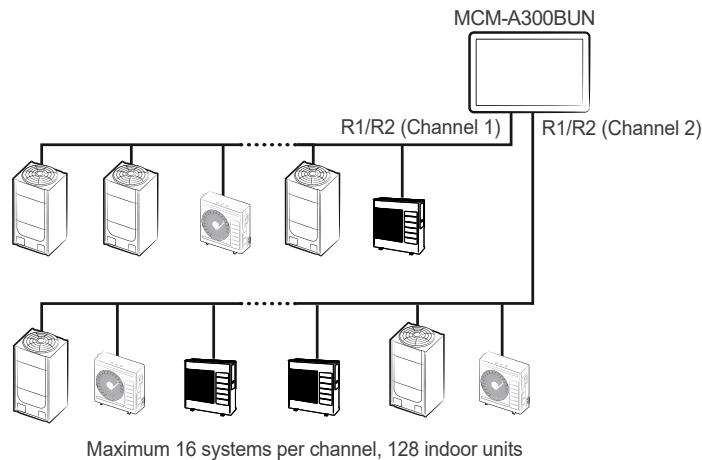
Basic Connection



System Layer Connection (F1/F2)



Central Control Layer Connection (R1/R2)



The diagrams on this page are for reference only. Refer to installation manual for wiring and installation instructions. Other configurations are possible.



SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase)

Project: _____ Substitution Request Number: _____

 From: _____
 To: _____ Date: _____

 A/E Project Number: _____
 Re: _____ Contract For: _____

Specification Title: _____ Description: _____
 Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
 Manufacturer: _____ Phone: _____
 Address: _____
 Trade Name: _____ Model No.: _____
 Installer: _____ Phone: _____
 Address: _____

History: New product 1-4 years old 5-10 years old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____
 Address: _____ Owner: _____
 _____ Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____ days.

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase — Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
 - Same warranty will be furnished for proposed substitution as for specified product.
 - Same maintenance service and source of replacement parts, as applicable, is available.
 - Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
 - Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
 - Proposed substitution does not affect dimensions and functional clearances.
 - Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
 - Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.
-

Submitted by: _____

Signed by: Luke Haskins _____

Firm: _____

Address: _____

Telephone: _____

Attachments:

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

Additional Comments: Contractor Subcontractor Supplier Manufacturer A/E
 Other:

Report

Project

Customer:

Project Name: Trap Pond State Park - Splash Park - Split System Heat Pump

Location: USA, Wilmington, DE

Date: 2025-05-02

Designer

Name:

Phone:

Email:

Address:

Software

Version: 2.0.1.33

DB version: 20250430-120005

Table of Abbreviations

Abbreviation	Description
Add. Ref.	Additional Refrigerant
AM	Airflow Mode
Block Load	Block Load
CM	Cooling Operation Mode
Corr. Capa	Correction Capacity
Corr. Pl	Correction Power Input
CR	Combination Ratio
DB	Dry Bulb Temperature
Des Temp	Design Temperature
Dis. Temp.	Discharge Temperature
Equip. Name	Equipment Name
EWT	Entering Water Temperature
FR	Flow Rate
HM	Heating Operation Mode
IDU	Indoor Unit
LWT	Leaving Water Temperature
Max. Capa	Maximum Capacity
Min. HOR	Minimum Heating Operation Ratio
ODU	Outdoor Unit
Op. WF Range	Operating Water Flow Range
Op. WT Range	Operating Water Temperature Range
Operating Temp. Range	Operating Temperature Range
PHE	Plate Heat Exchanger
Pipe Mat.	Piping Material
PL	Pressure Loss
PWL	Sound Power level
Ref. Pipe	Refrigerant Pipe
Rq. Vent. Vol.	Required Ventilation Volume
SHC	Sensible Heat Capacity
SPL	Sound Pressure Level
TC	Total Capacity
WB	Wet Bulb Temperature
47/43, 120	DB / WB, LWT (for DVM Chiller Heating capacity)

Equipment List

Type	Model Code	Description	Unit	Qty.	
ODU	AC018BXADCH/AA	CAC Universal Heat Pump	EA	1	
IDU	AC018BNHDCH/AA	HSP Duct	EA	1	
Controller	MWR-WG00UN	Wired remote controller	EA	1	
Accessory	FB-DS2	Filter box for Duct S	EA	1	
Add. Ref.	R410A	Refrigerant	lbs	0.04	
Type	Size	Length [ft] / Quantity [EA]			
		Liquid Pipe	Gas Pipe	H.P. Gas	Total
Ref. Pipe	6.35(1/4")	30.00	0.00	0.00	30.00
	12.7(1/2")	0.00	30.00	0.00	30.00

Piping

System (HPU-1)

Design Condition

Design Condition (Air)	Outdoor		Indoor	
	CM	HM	CM	HM
Temperature (DB/WB) [°F]	95.0 / 78.0	0.0 / 0.0	75.0 / 63.0	70.0 / 58.0
Altitude Correction	-			

Installation

Type	Floor	Room Name	Equip. Name	Model Code
ODU	1F	-	HPU-1	AC018BXADCH/AA
IDU	1F	-	FCU-1.1	AC018BNHDCH/AA

Outdoor Unit

Equip. Name	Model Code	CR [%]	Max. Capa. [Btu/h]		Corr. Capa. [Btu/h]	
			CM	HM	CM	HM
HPU-1	AC018BXADCH/AA	-	-	-	17114.00	21193.00

Indoor Unit

Equip. Name	Model Code	AM	Des Temp[°F]		Max. Capa. [Btu/h]				Corr. Capa. [Btu/h]		
			CM	HM	CM		HM	CM		HM	
			IN WB	IN DB	TC	SHC	TC	TC	SHC	TC	
FCU-1.1	AC018BNHDCH/AA	-	63.00	70.00	-	-	-	17114.00	12020.00	21193.00	

Accessory

Equip. Name	Model Code	Address				Accessory
		Main	RMC			
HPU-1	AC018BXADCH/AA	-	-	-	-	

System Check Result

Checklist	Restriction Value	Design Result
Long pipe length is 30.00 ft (Restriction: 164.00 ft).	164.00 ft	30.00 ft
Total pipe length is 30.00 ft (Restriction: 164.04 ft).	164.04 ft	30.00 ft
Height difference between ODU and IDU is 0.00 ft (restriction: 98.40 ft) (ODU higher than IDUs).	98.40 ft	0.00 ft

Piping (Continued)

System (HPU-1) (Continued)

System Check Result

Checklist	Restriction Value	Design Result
Height difference between ODU and IDU is 6.56 ft (restriction: 98.40 ft) (ODU lower than IDUs).	98.40 ft	6.56 ft

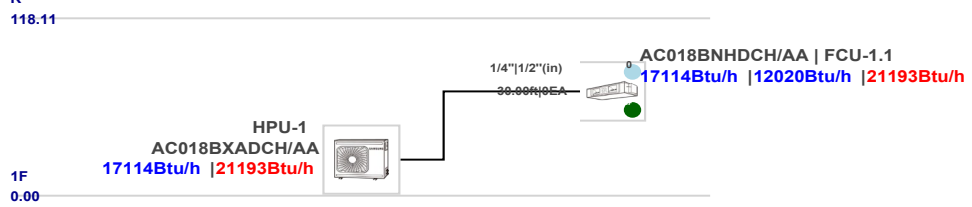
Refrigerant

Factory Charging and Additional Refrigerant Amount	Refrigerant Amount [lbs]
Factory Charging Refrigerant Amount	4.41
Additional Refrigerant Amount	0.04
Total	4.45

Piping (Continued)

System (HPU-1) (Continued)

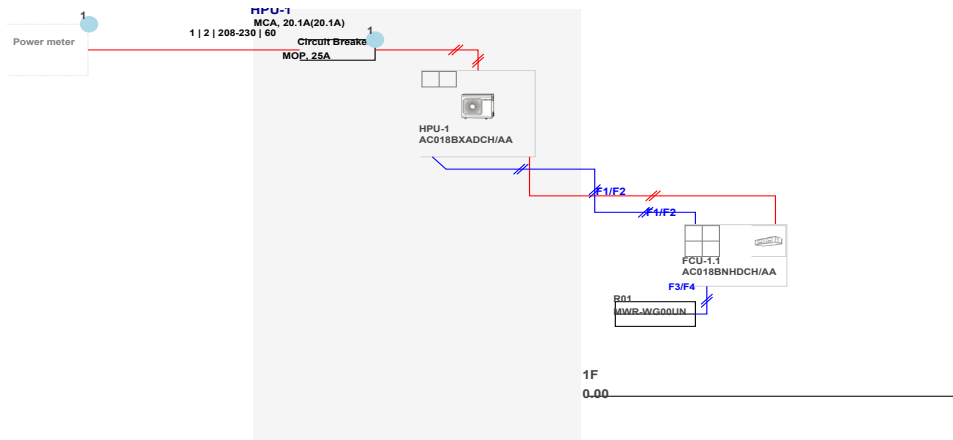
Piping Diagram



-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Wiring and Controller

Wiring and Controller Diagram



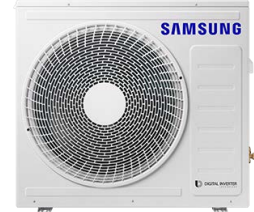
-The above system configuration may differ from The actual installation conditions.
Please refer to The installation manual for full details.

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

Specifications

Model	Indoor Unit Model Number (US Code)		AC018BNHDCH/AA (CNH18HDB)	
	Outdoor Unit Model Number (US Code)		AC018BXADCH/AA (CXH18ADB)	
Performance	Nominal Capacity	Cooling / Heating (Btu/h)	18,000 / 20,000	
	Capacity Range	Cooling (Btu/h)	6,000 - 24,000	
		Heating (Btu/h)	5,000 - 30,000	
	AHRI 210-240 2017 ¹	SEER		19.6
		EER		12.5
		HSPF		10.60
	AHRI 210-240 2023 ²	SEER2		18.0
EER2			12.0	
HSPF2			8.1	
Power	Voltage	ø / V / Hz	1 / 208-230 / 60	
	Working Voltage Range (VAC)		187 - 253	
	Operating Current (min. / std. / max.)	Cooling (A)		2.5 / 6.6 / 11.0
		Heating (A)		2.0 / 7.0 / 19.0
	Max. Breaker	Amps		25
Min. Circuit Ampacity (A)			20.1	
Dimensions	W X H X D (in.)	Indoor Unit	47 1/4 X 9 13/16 X 27 9/16	
		Outdoor Unit	34 5/8 X 31 7/16 X 12 1/4	
	Weight (lbs.)	Indoor Unit		76.9
		Outdoor Unit		118.4
	Duct Connections (W X H)	Supply (in.)		45 15/16 X 8 11/16
Return (ID, in.)			45 15/16 X 8 11/16	
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	26 / 30 / 34	
	Outdoor Unit dB(A)	Cooling / Heating (high)	48 / 48	
Operating Temperatures	Outdoor	Cooling	23 ~ 122°F (-5 ~ 50°C) 0 ~ 122°F (-18 ~ 50°C) W/Baffle	
		Heating	-13 ~ 75°F (-25 ~ 24°C)	
	Indoor	Cooling	64 ~ 90°F (16 ~ 32°C)	
		Heating	T ≤ 86°F (30°C)	
Pipe Connections	Indoor & Outdoor	High side	1/4"	
		Low side	1/2"	
	Maximum (ft.)		164	
	Maximum Vertical Separation (ft.)		98.4	
Condensate Connection			1 1/4 in. OD, 1 in. ID	
Refrigerant	Type		R410A	
	Factory Charge	lbs.	4.41	
	Charged for		24.6 ft.	
Compressor	Manufacturer		Samsung	
	Type		Inverter Driven, Twin BLDC Rotary	
	RLA	Amps	12.7	
Evaporator Fan	Type		BLDC (1) With Sirocco Fan (3)	
	Air Volume	CFM (L/M/H)	477 / 537 / 618	
	Output	Watts	153	
	External Static Pressure	Standard ("WC)		0.18
		Min. / Max. ("WC)		0.1 / 0.8in. WC
Condenser Fan	Motor		BLDC With Axial Type Fan (1)	
	FLA / Watts / CFM (max.)		1.25A X 1 / 125W X 1 / 2,154 CFM	
Safety	Certifications		UL 60335-2-40	
	Devices		PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing	



General Information

- The outdoor unit shall supply power to indoor unit via 14 AWG X 3 power wire
- High-voltage terminal block temperature sensor to disable unit in the event of power connection overheating
- Integral condensate pump with maximum 29" lift from bottom of the unit with check valve and float switch that disables indoor should condensate overflow be detected.
- Auto-restart after power loss
- Soft-start compressor minimizing current inrush
- All heat exchangers shall be mechanically bonded aluminum fin to copper tube
- The condensing unit heat exchanger salt spray test method: ISO-9227- the heat exchanger showed no unusual rust or corrosion development to 3,000 hours.
- Base pan heater equipped as standard
- System shall provide 100% heating capacity at -4°F(-20°C)

Option settings

- The outdoor unit shall have snow accumulation prevention option setting to prevent snow drifting against an idle outdoor unit.
- Night-time Quiet Mode: reduction of operational sound during evening hours (automatic or manual activation).
- Emergency Temperature Output (ETO) function: when indoor unit is in error status or when room temperature exceeds configurable temperature level, the system outputs a signal to an external source, e.g., backup system, building management system, alert device (ex: status light, warning lamp, buzzer).
- System can be set up as heating/cooling, cooling only, or heating only via outdoor unit option setting.
- Maximum Current Control configurable from 50% - 100% via outdoor unit, wired controller, or central controller

Indoor Fan

- Indoor fan is sirocco type
- Three fan speed settings and auto setting
- Smart pressure control feature that adjusts fan speed based on ESP delivering consistent heating and cooling power
- The indoor unit shall have a smart-tuning function that can provide optimized comfort by allowing the occupant to offset the fan CFM curve with a wired remote controller (MWR-WG00UN) to increase or decrease airflow.
- The indoor unit shall have automatic air volume scanning for simple setup and optimized comfort settings for the occupant.

Construction

- Outdoor unit shall be galvanized steel with a baked-on powder coated finish for durability
- Indoor Unit: Insulated, galvanized steel.

Controls

- Control wiring shall be 2 X 16 AWG
- No additional interface modules/adapters are required when connecting to Samsung central control options.
- The unit shall be operated via a wireless or wired remote control with DDC type signal
- Dual set temperature support when connected to MWR-WG00UN Advanced Wired Controller or central control options.
- Wired or wireless controllers must be purchased separately

Refrigerant System

- The compressor shall be hermetically sealed, inverter-controlled BLDC rotary type.
- Refrigerant flow shall be controlled by an electronic expansion valve at outdoor unit

Air Filtration

- Air filtration shall be field provided
- Pressure drop across field-supplied filter must be factored into the total ESP.

Warranty

10 Years compressor, 10 years parts, 1 year limited labor when registered

This publication reflects both the 1987 Appendix M metric (SEER) and the 2023 Appendix M1 metric (SEER2). Efficiency requirements are published at 10 C.F.R. 430.32(c). Please refer to www.AHRInet.org for more information about updated energy metrics.

¹Performance data certified by AHRI to AHRI 210-240 (2017) with Addendum 1.
²Performance data certified by AHRI to AHRI 210-240 (2023). Effective January 1st, 2023.

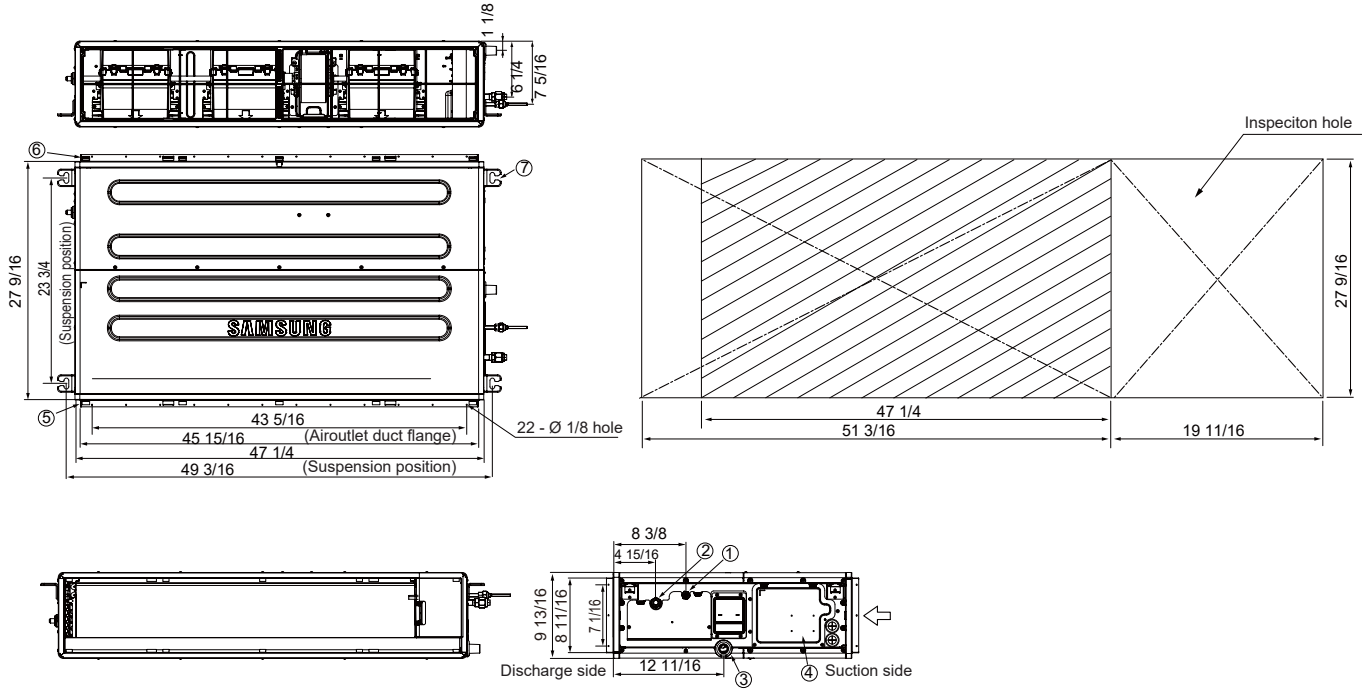
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

Select models are ENERGY STAR Labeled. Proper sizing and installation of equipment is critical to achieve performance. Split system air conditioners and heat pumps (excluding ductless systems) must be matched with appropriate coil components to meet ENERGY STAR criteria. Ask your contractor for details or visit www.energystar.gov.

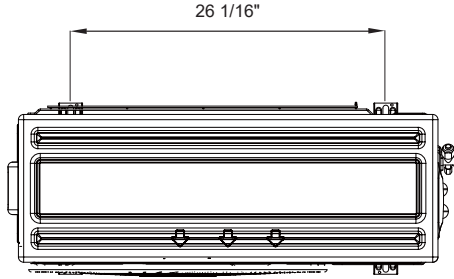


Optional Accessories

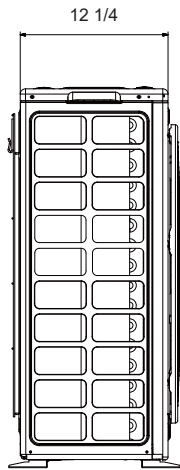
Wired Controller	Advanced	<input checked="" type="checkbox"/> MWR-WG00UN
	Touchscreen	<input type="checkbox"/> MWR-SH11UN
Thermostat Adaptor (for connection to a standard 24VAC thermostat)		<input type="checkbox"/> MIM-A60UN
Wireless Signal Control	Wireless Signal Receiver	<input type="checkbox"/> MRK-A10N
	Wireless Controller	<input type="checkbox"/> AR-EH04U
Wi-Fi Adapter		<input type="checkbox"/> MIM-H05UN
External Temperature Sensor		<input type="checkbox"/> MRW-TA
Filter Box		<input checked="" type="checkbox"/> FB-DS2
External Contact Control		<input type="checkbox"/> MIM-B14
Wall Bracket (for outdoor unit)		<input type="checkbox"/> CKN-250
Wind Baffles	Front	<input type="checkbox"/> WBF-7M
	Back	<input type="checkbox"/> WBB-7M-B
Hail Guard Kit (includes back and side guards)		<input type="checkbox"/> HGK-2
Line Sets - insulated and flared, interconnect cables included		<input type="checkbox"/> 25' - ILS-2507
		<input type="checkbox"/> 50' - ILS-5007



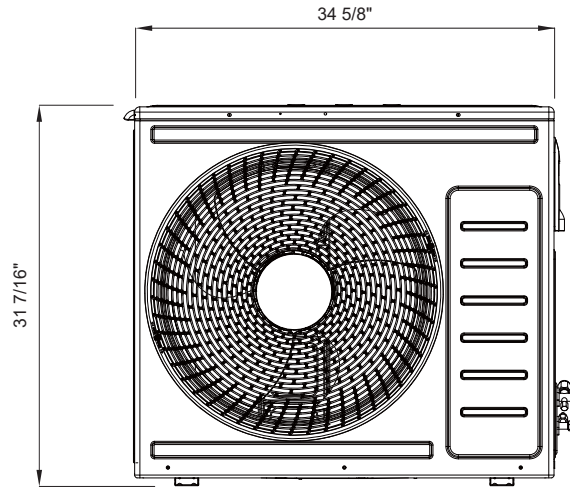
No.	Name	Description
①	Refrigerant Liquid Pipe	Ø 1/4"
②	Refrigerant Gas Pipe	Ø 1/2"
③	Condensate Drain	3/4" (OD 1.05")
④	Power & Comm. Wiring Conduits	-
⑤	Supply Air Flange	-
⑥	Return Air Flange	-
⑦	Hook	-



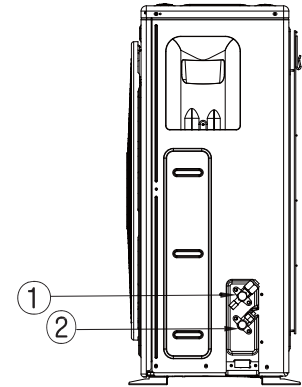
TOP



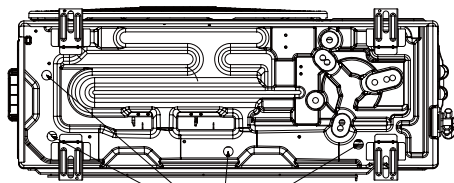
LEFT



FRONT



RIGHT



BOTTOM

No.	Name	Description
1	Refrigerant liquid pipe	Ø 1/4
2	Refrigerant gas pipe	Ø 1/2
3	Drain hole	Connect with provided drain plug

Filter Box For Samsung Duct S Indoor Units

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

Model number(s) on project

	FB-DS1
✓	FB-DS2
	FB-DS3

Description

- Filter box for Samsung Duct S units.
- Allows simple field modification to bring air in thorough the back (default) or bottom of the filter box.

Filter Sizes (nominal, field provided)

FB DS1: 2 X (14" X 16")
 FB DS2: 1 X (14" X 20") + 1 X (14" X 25")
 FB DS3: 2 X (14" X 25")
 Note: Filters can be 1" or 2" thick.

NOTE:

When selecting an air filter, make sure not to exceed the static pressure limitations of the indoor unit. Choose a filter that will not exceed the stated capabilities of the indoor unit.

Construction

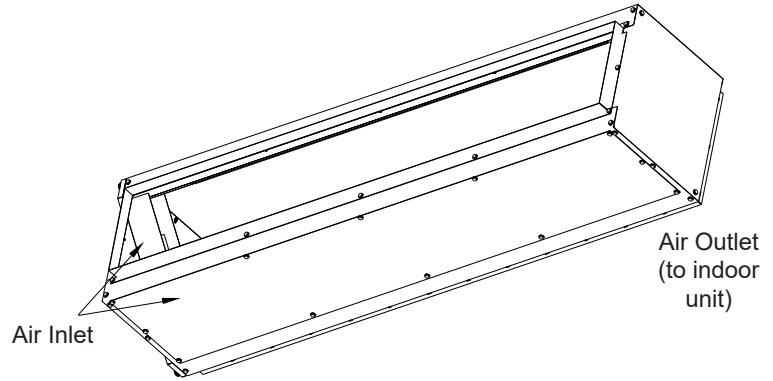
Galvanized steel, 22 gauge

Weight (lbs.)

FB-DS1	21.2
FB-DS2	29.0
FB-DS3	28.70

Parts Included

Assembled filter box, instruction sheet, installation screws.



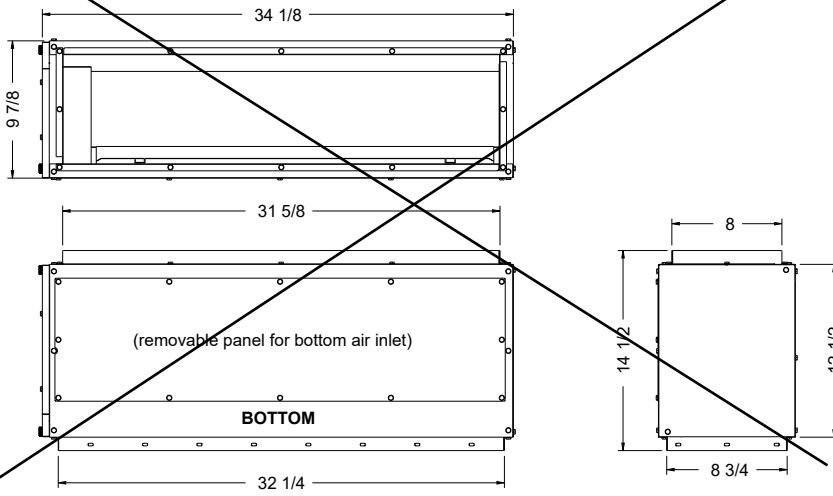
Compatible Indoor Units

Filter Box	Indoor Unit Model Number
FB-DS1	AC009BNHDCH/AA
	AC012BNHDCH/AA
	AC018MNHDCH/AA
	AM006ANMDCH/AA
	AM007ANMDCH/AA
	AM009ANMDCH/AA
	AM012ANMDCH/AA
	AM015ANMDCH/AA
	AM007MNMDCH/AA
	AM009MNMDCH/AA
	AM012MNMDCH/AA
	AM015MNMDCH/AA
	AM018MNMDCH/AA
	AM006RNMDCH/AA
	AJ009BNHDCH/AA
AJ012BNHDCH/AA	
AJ015BNHDCH/AA	
AJ018BNHDCH/AA	
FB-DS2	AC018BNHDCH/AA
	AC024BNHDCH/AA
	AC030BNHDCH/AA
	AC030MNHDCH/AA
	AC024MNHDCH/AA
	AM024ANHDCH/AA
	AM027ANHDCH/AA
	AM030ANHDCH/AA
	AM018ANMDCH/AA
	AM024MNHDCH/AA
	AM027MNHDCH/AA
	AM030MNHDCH/AA
AM018RNMDCH/AA	
FB-DS3	AC036BNHDCH/AA
	AC042BNHDCH/AA
	AC048BNHDCH/AA
	AC036MNHDCH/AA
	AC042MNHDCH/AA
	AC048MNHDCH/AA
	AM036ANHDCH/AA
	AM048ANHDCH/AA
	AM036MNHDCH/AA
	AM048MNHDCH/AA

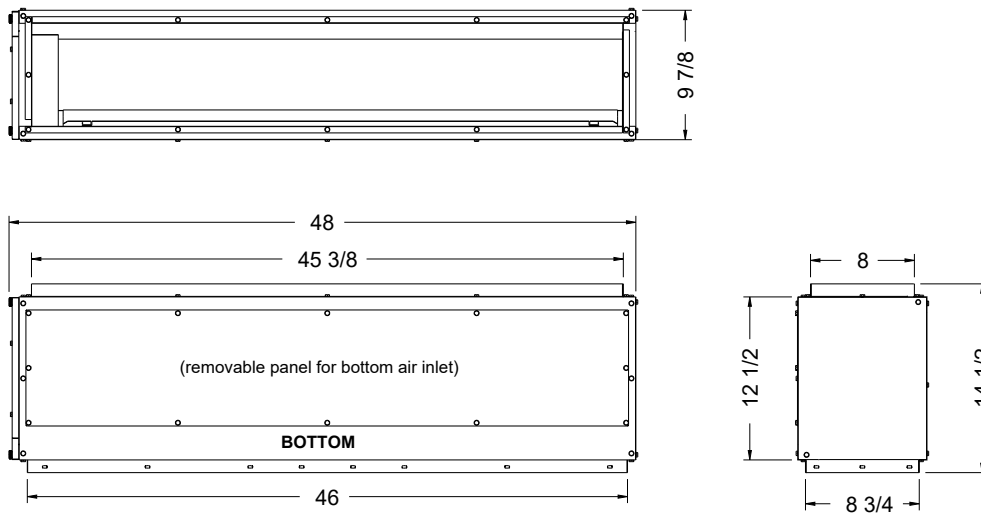
Filter Box For Samsung Duct S Indoor Units

Dimensions

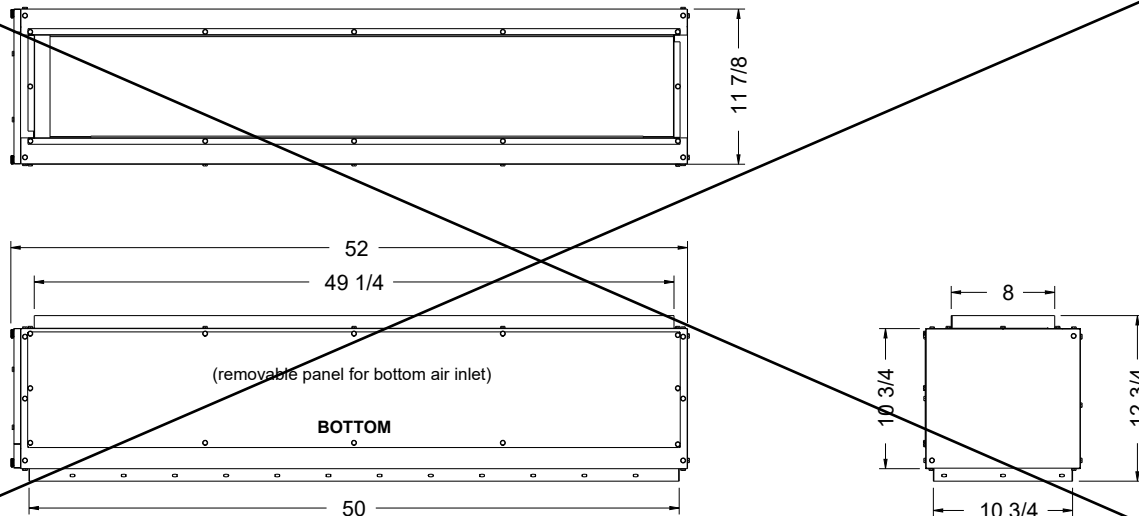
~~FB-DS1~~



FB-DS2



~~FB-DS3~~



Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

www.SamsungHVAC.com

888-699-6067

Samsung Advanced Wired Remote Controller

Job Name _____
 Purchaser _____
 Submitted to _____
 Unit Designation _____

Location _____
 Engineer _____
 Reference Approval Construction
 Schedule # _____

Features

Easy indoor unit control ¹

- Air handler operation ON/OFF
- Air handler operation mode, set temperature, air flow direction, fan speed
- Discharge air temperature setting (with supported indoor unit models)
- Filter replacement alarm display and reset
- Single indoor unit control or multiple unit control (maximum 16 units)
- Time synchronization with DMS2.5 gateways
- Dual Set Temperature (indoor unit firmware upgrade may be required ²)
- Advanced HP auto changeover control and configuration (indoor unit firmware upgrade may be required ²)
- Quiet and sleep modes
- Error display (up to 10 error codes with descriptions)

Energy saving operation ¹

- Upper/lower temperature restriction setting
- Occupied/unoccupied settings
- Setback function
- Energy saving operation mode
- Energy consumption monitoring and daily, weekly, monthly, and yearly energy consumption trending (for supported systems)
- Maximum current control for DVM S 3Ø outdoor units (AM****XV****AA), and CAC (AC0**BXADCH/AA) outdoor units.

Weekly operating schedule setting

- Weekly operating schedule
- Able to set desired A/C operation mode, setting temperature and fan speed to operate based on weekly schedules
- Able to apply schedule exception day

Other features ¹

- Color display screen
- Different button permission levels
- Supports multiple languages (English, Spanish, French, Portuguese)
- Partial button lock options (operation on/off, heat mode, cool mode, fan mode, dry mode, auto mode, set temperature, fan speed, scheduling, Wind-Free, Long-wind, quiet mode, and sleep mode buttons can be locked individually).
- Daylight savings clock advance option
- Temperature limit setting option
- Real-time clock function
- Built-in IR receiver for indoor unit control using a wireless controller and integral room temperature sensor
- Indoor unit operation state display
- Indoor unit service mode support
- Micro SD card slot for simple firmware updating
- Independent louver control for 4-Way and Mini 4-Way cassette units
- Airflow direction control for 360 Cassette indoor units. DVM S 360 Cassette units manufactured before 7/1/2016 will require a firmware update to use MWR-WG00UN. Contact Samsung HVAC technical support to obtain the firmware upgrade files. Firmware updating can be done using MIM-C02N communication converter/service tool.
- Adjustable heating temperature compensation values
- Wind-Free™ Control (applies to supported WindFree™ 1-Way, 4-Way, Mini 4-Way, and Wall-mounted indoor units).
- MDS (Motion Detection Sensor) Indirect/ Direct Control (applies to cassette units with optional MDS accessory (sold separately)).
- Long Reach Function (for applicable indoor unit models)
- Automatic air volume enable and status viewing (for Duct S models AM0**MNMDCH/AA, AM0**MNHDC/AA, AM0**RNMDCH/AA, and AC0**NHDCH/AA).

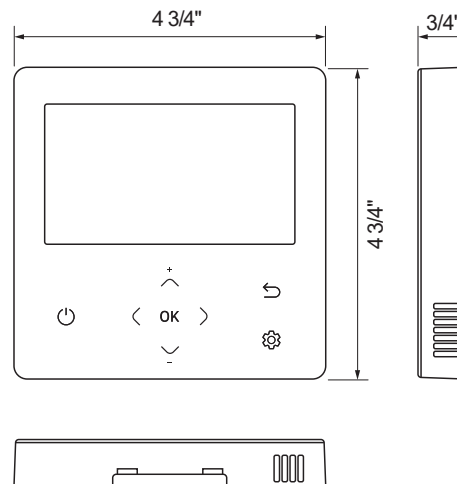
¹ Some features may not be available depending on the model of connected air handler(s)

² Firmware upgrade may be required for certain features. Refer to supporting technical bulletins at www.SamsungHVAC.com/downloads



Specifications*

- Compatible with Samsung DVM S Systems (AM*****AA, MCM-D211UN), and DVM Chiller FCU Kits (MIM-F00N), single zone wall-mounted systems (AR**T****WKNCV, AR**B****WKNCV), multi-zone systems (AJ0**TN*DCH/AA, AJ0**BN*DCH/AA), and single zone cassette, wall-mounted, and ducted systems (AC0**N****/AA)
- Can connect and control up to 16 indoor units on a single system or across multiple systems
- 2 Conductor connection
- DC 12V power supplied by indoor unit (consumption: 2W)
- PLC (power line communication) is done on F3/F4 terminals.
- Can sense temperature via internal sensor, temperature sensor inside indoor unit, or use the average temperature between controller and air handler temperature sensors



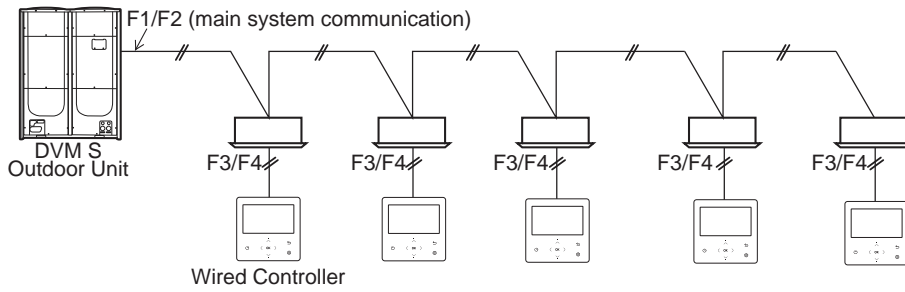
Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice.

www.SamsungHVAC.com

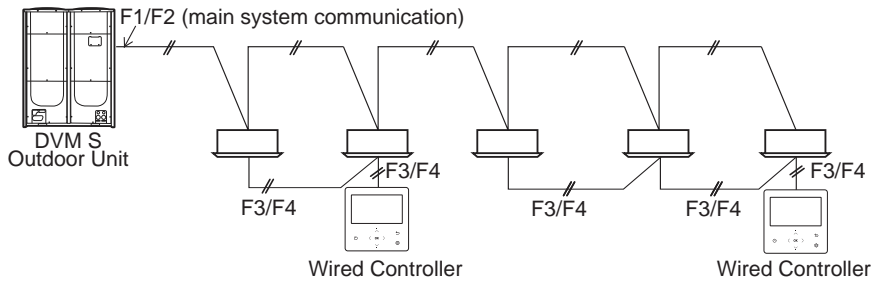
888-699-6067

Samsung Standard Wired Controller
Common Controller Configurations/Options

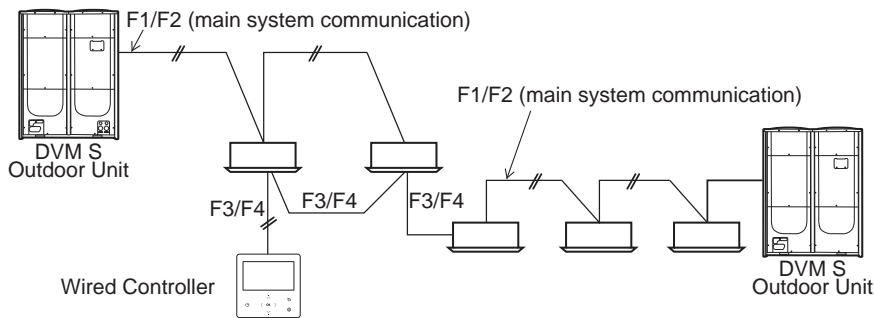
Individual control - 1 indoor unit with 1 wired control



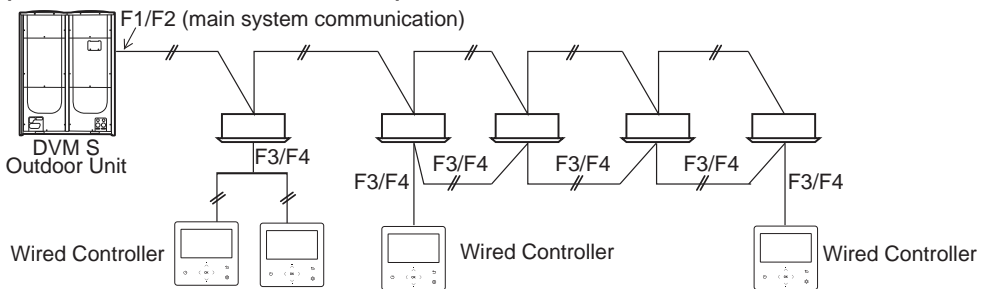
Group control - up to 16 indoor units on 1 wired controller



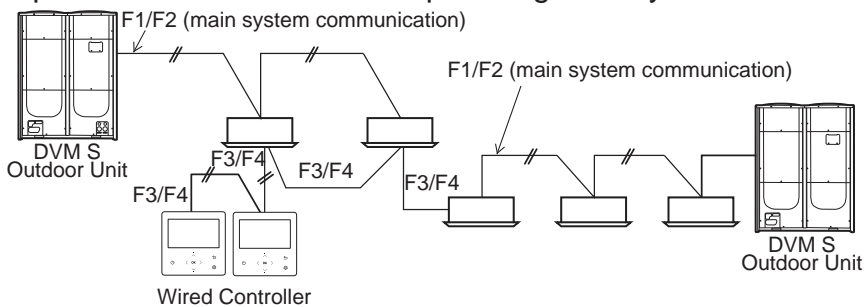
Group control - up to 16 indoor units on 1 wired controller on multiple refrigerant systems



Group control - control 1 or multiple indoor units with 2 wired controllers

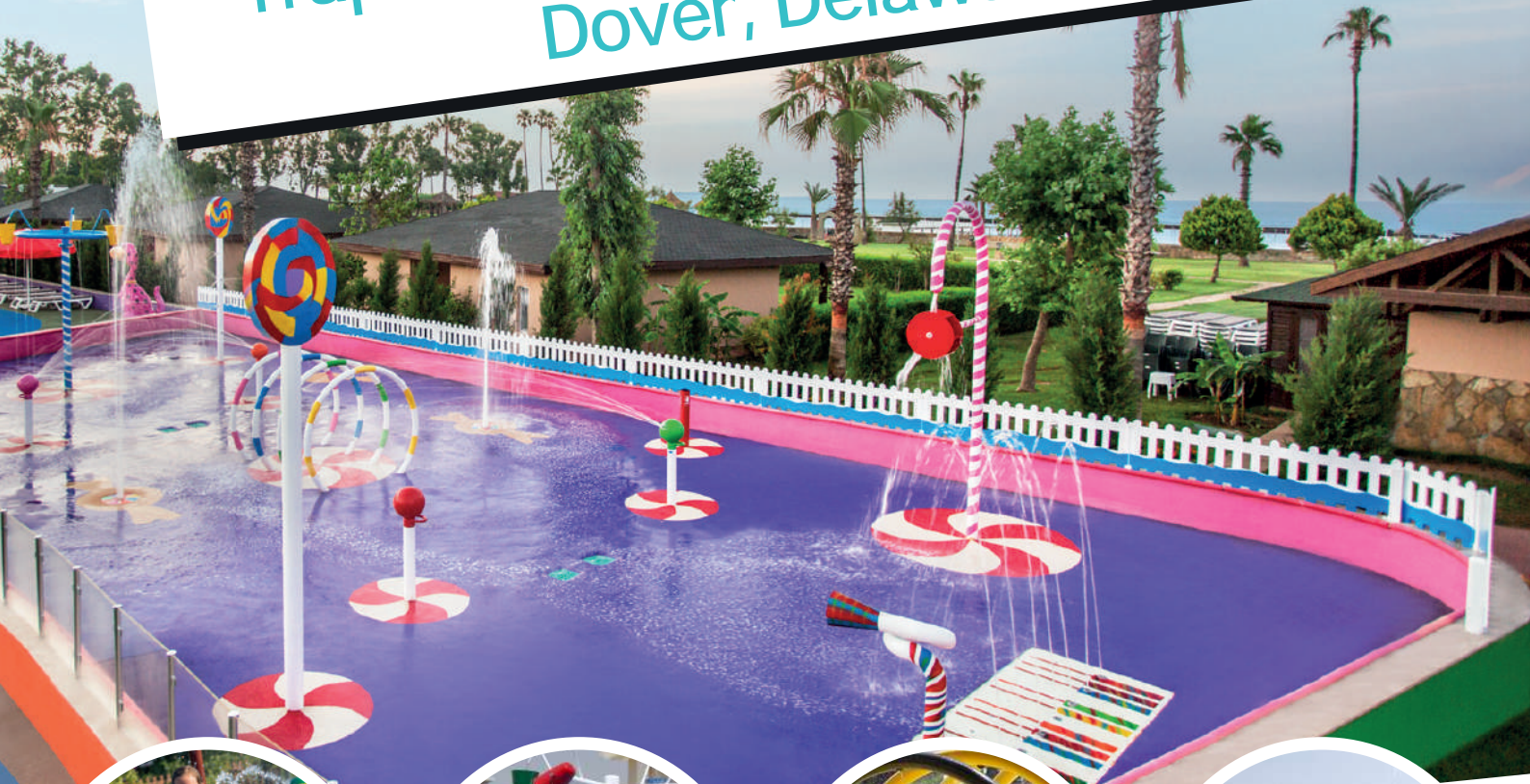


Group control - up to 16 indoor units on multiple refrigerant systems with 2 wired controllers



2025-6186

Trap Pond State Park Splash Pad,
Dover, Delaware



WATER SPLASH PROJECT PROPOSAL

Request for equivalence

About Water Splash, Inc.



WATER SPLASH

Water Splash, Inc. is an innovative water playground equipment manufacturer founded in 2003 by a team of engineers who put their skills at the heart of their enterprise, with an emphasis on continuous product improvement through research and development. Our team has a total of 15 years experience in the design and manufacture of splash park equipment. We provide products for splash pads, spray parks/spray grounds and swimming pools. We have a strong engineering and customer care group that will provide the technical support you need at every stage of your project. Our durable and reliable products come with timely and personalized customer service, and they're factory assembled and tested to reduce your installation costs. Backed by some of the strongest product warranties in the industry and an unparalleled safety record, Water Splash is rapidly becoming the benchmark for top quality splash pad products.



Key Personnel

CEO & Project Manager - Gokhan CELIK / gcelik@watersplashnet.com

Co-Partner & Director of Sales-Design - Zafer INANC / zinanc@watersplashnet.com

Engineering Manager - Murat SINAV / msinav@watersplashnet.com

Production & Planning Manager - Abdul Jamil HALIMI / jhalimi@watersplashnet.com

Construction Manager - Milan PETROVA / mpetrova@watersplashnet.com

Aquatic & Mechanical Engineer - Mehdi MOUSAVI / mmousavi@watersplashnet.com

Sales Specialist - Serap ACAR / sacar@watersplashnet.com

Customer Service & Accounting - Maya PETROVA / mpetrova@watersplashnet.com

Our project team has decades of experience in designing, manufacturing, and building spray parks and aquatic facilities, moreover we will continue to design and construct with a Safety First emphasis for this project. Information on our teams experience with Safety and Management is included in the appendix A. A preliminary safety plan can be submitted upon request.

We look forward to working with you.

Gokhan Celik
Water Splash,
gcelik@watersplashnet.com
(800) 936-3430



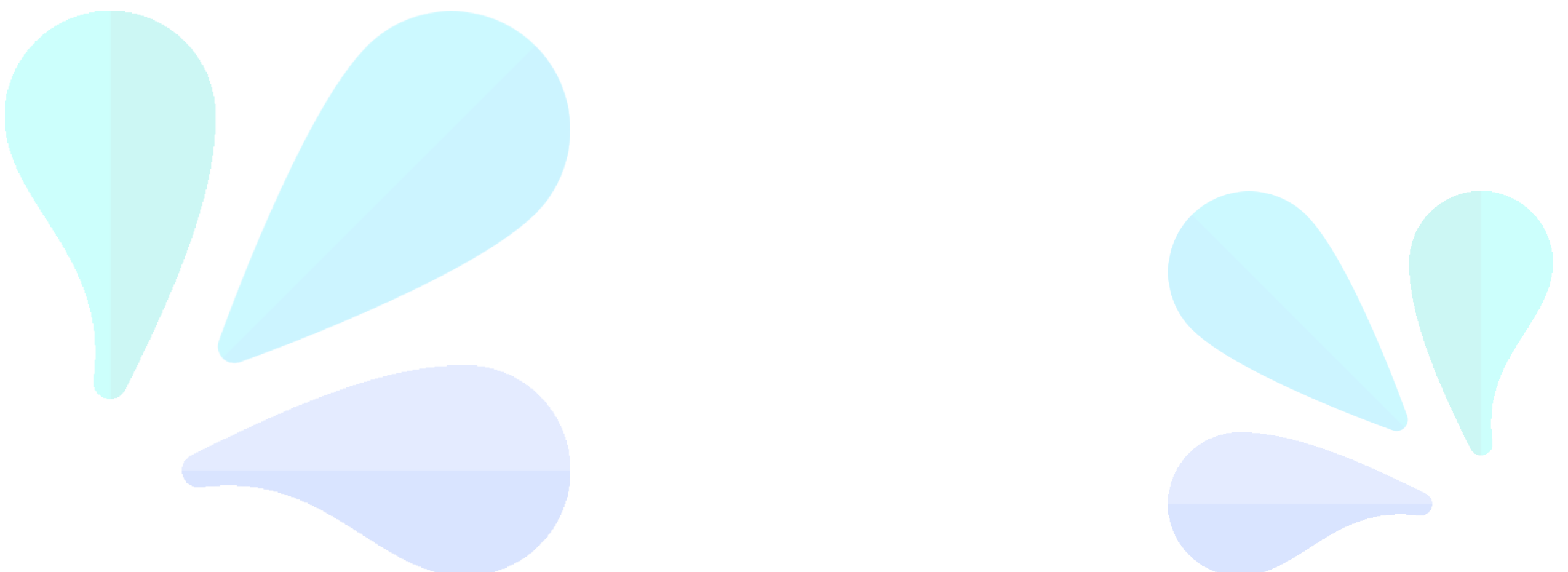
Water Splash offers its expertise in splash park design, manufacturing and installation for your project. Our approach is to work with customer directly and get customer's input for each stage of the project. Therefore, within the first week of project approval, we schedule an online meeting with customer's representatives and our project manager. The goal of this meeting is:

- * Identify if there is any changes on proposed splash park layout,
- * Finalize product list and colors for splash park, List each departments and contacts for
- * Construction Permit / If Required *Plumbing /Water Permit -Approval / If Required Electrical connection details / Permit if needed

Second stage is our production stage which is around 6-7 weeks. Between production completion and construction start, we will setup an onsite meeting with customer's representative to review final construction plans along with permit application status. After production is completed, our project manager will be onsite to receive all parts and start excavation, setting up anchor bases, placing and leveling products, grounding each product to mechanical room, plumbing each product to manifold lines, backfilling and surface concrete pouring. We will have pressure testing of plumbing connections before concrete is poured in order to make sure pipes withstand working pressure of Splash Park.

Last item is to commission Splash Park to owner by training customer's representative for daily day usage, and maintenance procedures.

Wishing to be a solution partner for your project.



Water Splash Engineering

Water Splash products are designed and manufactured to meet two basic criteria; fun and safety. Only the finest materials are used in the construction process, to ensure that maximum safeguards are incorporated into every design.



To this end, all manufacturing and tooling takes place in-house, and all products conform to or exceed ASTM F1487, ASTM F2461, SS457 and CSA Z614-07 standards.

Our in-house engineering and manufacturing expertise also provide our customers with another advantage: complete customization, to suit any and all of their needs.



Thank You

To: Splash Park Evaluation Committee,

Thank you for the opportunity given to submit Water Splash, Inc's unique splash park layout proposal for your community. Water Splash has over 15 years experience in designing, building and installing splash parks throughout the US, Canada, Europe and many other countries. We create your unique splash park design by considering: safety, play value, budget and aesthetics.

Our products are made of durable stainless steel material, which meet or exceed all requirements.

ASTM F-1487, ASTM F2461 (USA)

CSA Z-614-07 (CANADA)

EN 1176 (EU)

AS685 (AU) Electrical Components

European Union directives and standards

We look forward to discussing our proposal with you, ensuring all the special requirements within your community are met beyond satisfaction.

We appreciate your consideration and will always go that extra mile to earn your business.

Kind regards,

Gokhan CELIK

Water Splash

gcelik@watersplashnet.com

(800) 936 - 3430



Equivalent list

Waterplay	Base Bid - Qty	Additive Alternat e - Qty	Water Splash Inc.
DS Spring	1	1	S-09.02.07 CURVY RIVER
FS Toddler Slide	1	1	S-25.01.02 SURFERS WAVE SLIDE
FS Fish	2	2	S-04.23 TURNER OCTOPUS
FS Rain Forest	3	4	S-01.02.04 AQUA PINE TREE
FS Surf Stone #1	2	3	S-02.36.10 FOUNTAIN ROCK MINI 1 - AQUA SHAPES
FS Surf Stone #2	3	7	S-02.36.11 FOUNTAIN ROCK MINI 2 - AQUA SHAPES
FS Surf Stone #3	3	5	S-02.36.12 FOUNTAIN ROCK MINI 3 - AQUA SHAPES
FS Water-O	1	1	S-03.02 AQUA LOOP
FS Wiggly	6	6	S-04.08 WAVY CANNON
FS Charlotte's Web	6	6	S-05.22.03 SPIDER TWIST
Monster 5	4	4	S-05.14 AQUA RUSH
GS Solo Spurt	2	9	S-05.01.04 AQUA JET VERTICAL
GS Split Spurt	2	2	S-05.06.02 AQUA SPLIT
GS Spray Tunnel 4	2	2	S-05.05.02 AQUA TUNNEL JR.
GS Straight Up	4	4	S-05.01.03 STREAM JET
FS Basin	1	1	PART OF WATERFALL
FS Gully	1	1	PART OF WATERFALL
FS Leaflet	2	2	S-97.01.04 AQUA LEAF I
FS Waterfall #3	1	1	S-97.10.04 Aqua Accents II
GS Team Effect	3	3	S-05.12 INTERACTIVE SPLASH
FS Blue Bottle	0	1	S-07.18 FLORET
FS Flutter	0	1	S-01.59.03 BUTTERFLY TO GRASS
FS Lady Bug Soaker	0	1	S-25.04.16 GRAND SPLASH III
FS Sparx	0	2	S-01.46 GRASSHOPPER SPLASH
GS Doughnut Spray	0	1	S-05.23.02 MINI CIRCULAR
GS Fountain Mountain	0	2	S-05.25.01 FOUNTAIN SPRAY III
GS Geyser	0	3	S-05.06.01 AQUA GEYSER
FS Flutterby	0	1	S-02.08.05 HASTY CRAB
FS Hopper #2	0	1	S-02.08.03 AQUA NATURE FROG
FS Waterfall #1	0	1	S-97.10.06 AQUA ACCENTS VARIANT
GS Frog	0	3	S-02.17.01 AQUA FORMS FROG II
GS Puddle	0	4	S-05.22 SPIDER WEB SPRAY I
Activator Sprout	2	4	S-97.07 GARDEN ACTIVATOR
Circulator Drain	4	13	S-16.02 DRAIN BOX 24" DIA



CURVY RIVER S-09.02.07



Surface Mount



Mechanical Valve



Interactive

Flow Rate 12-18 gpm - 45-68 lpm

Pressure 8-14 psi - 0.6-1 bar

Height 5.9" - 15 cm

Length 246" - 626 cm

Width 67" - 171 cm

Spray Zone As Length X Width

Material Detail

Commercial grade, non corrosive, UV and chemical resistant, glass reinforced polyester material with foam wheels and 304/304L quality Stainless steel water inlet

Play Zones

Toddler Family Dynamic

Coating / Graphic Design

UV and chemical resistant, commercial grade epoxy coated spray paint

Pipe Diameter

-

Add-in Options

MATERIAL

Post : Stainless Steel 304/304L

COATING

Top : Translucent Engineering Plastic

PRE - COATING

OD : 3" - 4" Sch 10 Tube

NOZZLE

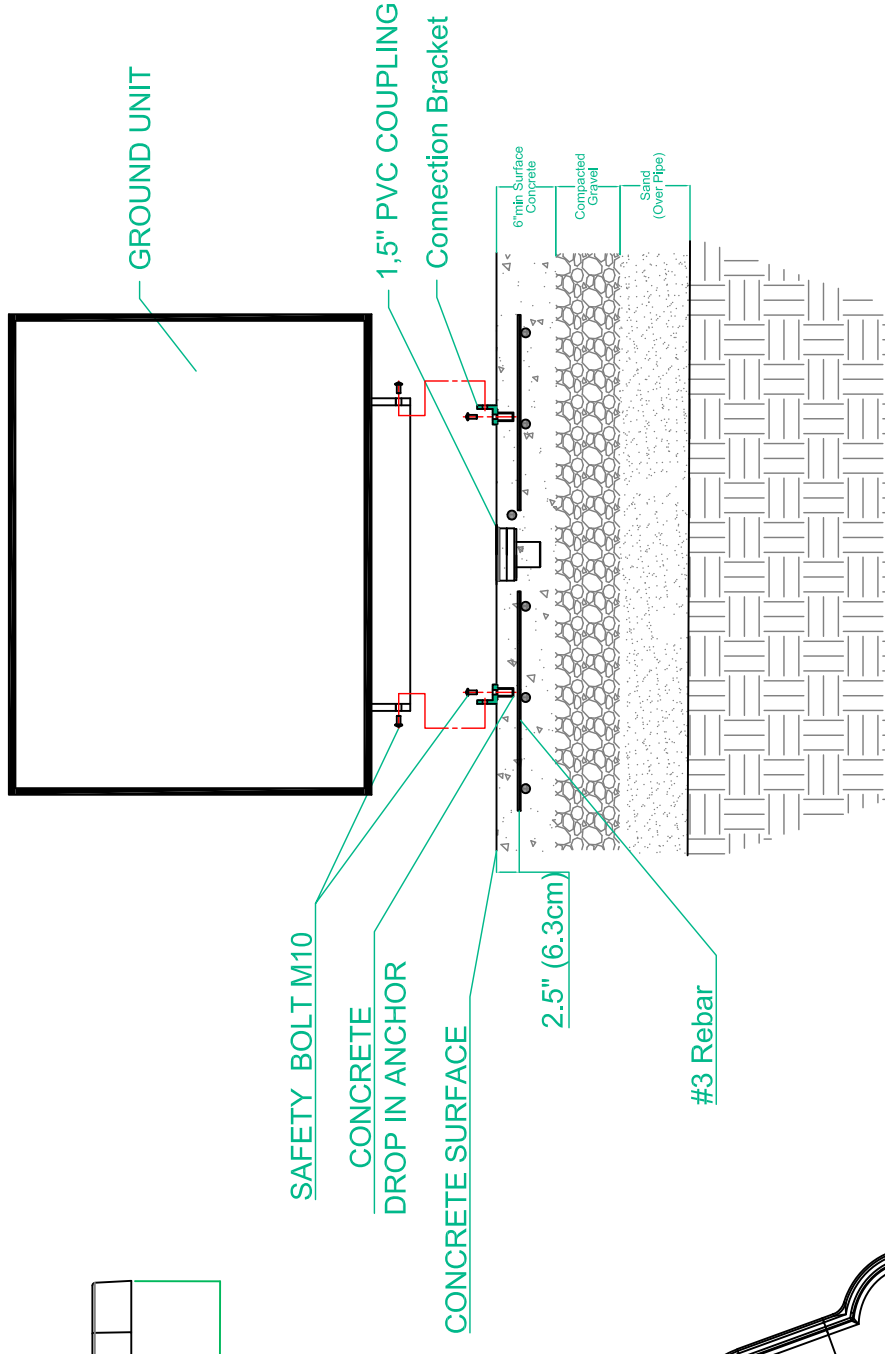
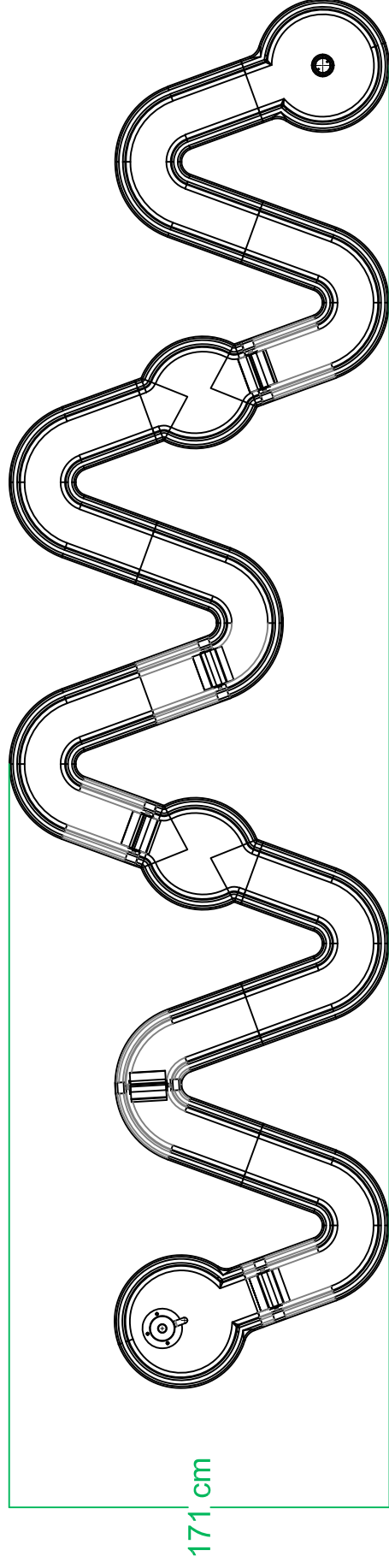
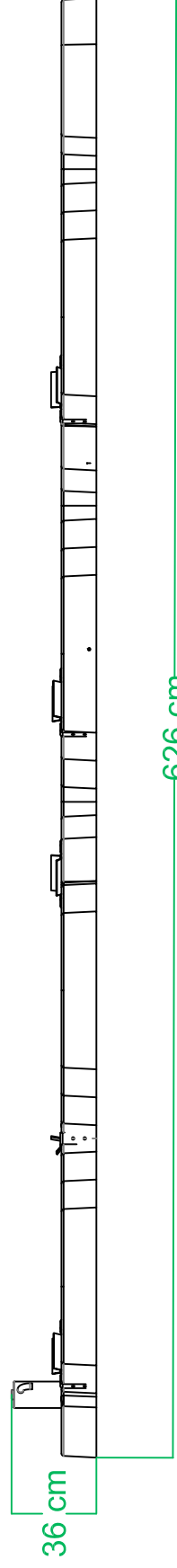
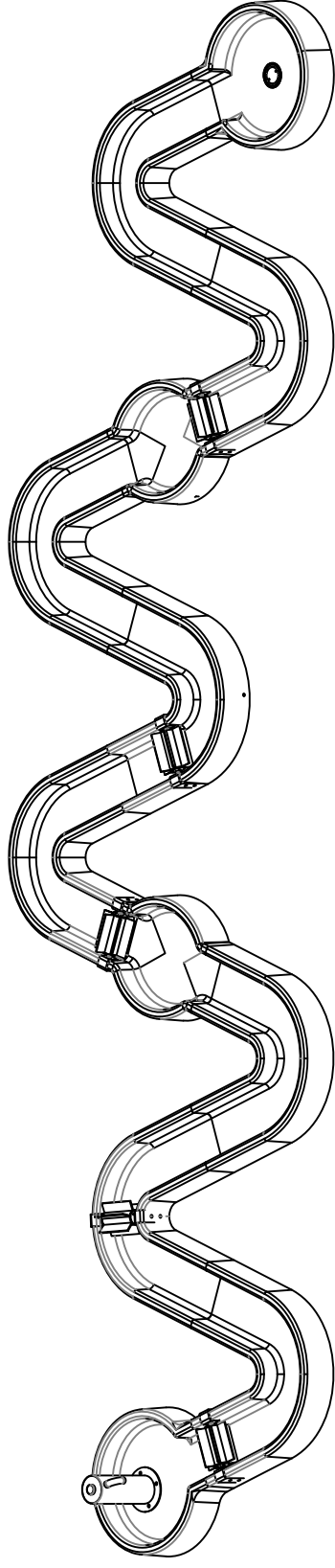
Oven Cured, Powder Paint

NOZZLE

Sand Blasting

NOZZLE

Brass



PROJECT NAME

CURVY RIVER

DRAWN BY/ DATE

i. UYGAR

PRODUCT NO

S-09.02.07

REV

0.1



WATER SPLASH INC.

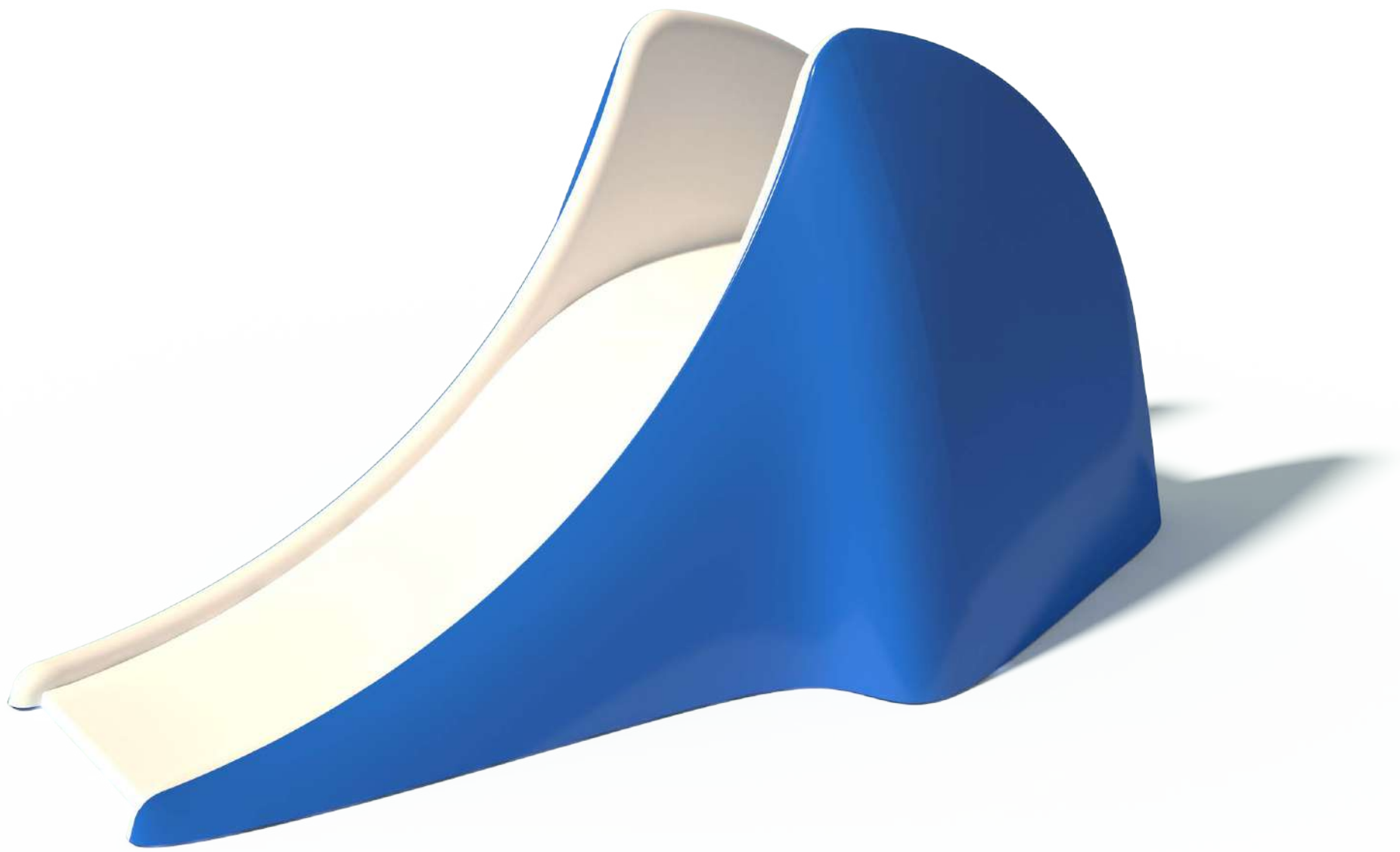
THIS DRAWING IS A PROPERTY OF WATER SPLASH INC. AND IS NOT TO BE REPRODUCED BY ANY MEANS OR USED TO FURNISH INFORMATION TO OTHERS WITHOUT THE EXPLICIT CONSENT OF WATER SPLASH

UNIT

CM

SHEET

SURFERS WAVE SLIDE S-25.01.02



Flow Rate 15-25 gpm - 57-95 lpm

Pressure 8-15 psi - 0.55-1.03 bar

Height 56" - 142 cm

Length 133.8 - 340 cm

Width 55.1" - 140 cm

Spray Zone ø162" - ø412cm

Material Detail

Commercial grade, non corrosive, UV and chemical resistant, glass reinforced polyester material with brass nozzles

Play Zones

Toddler Family Dynamic

Coating / Graphic Design

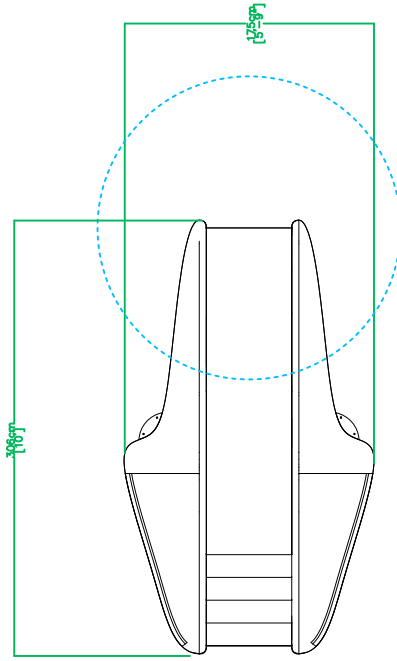
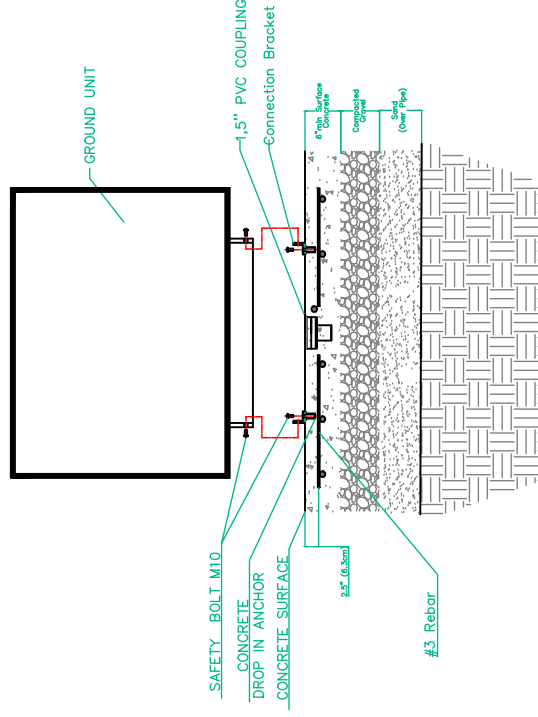
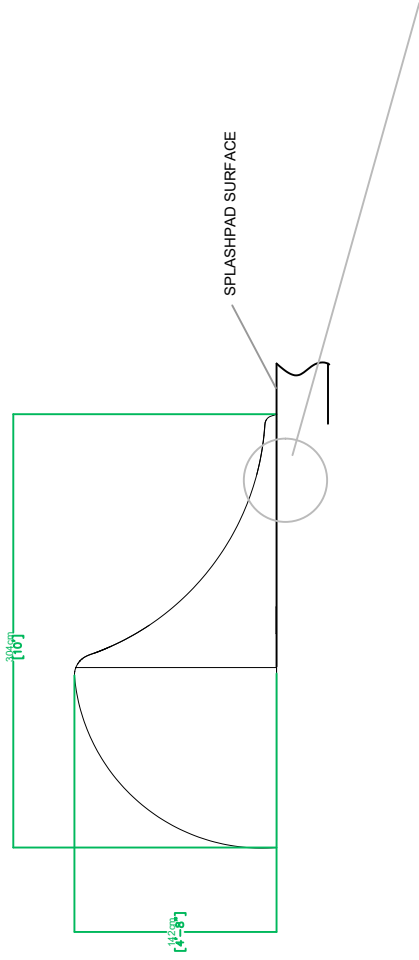
UV and chemical resistant, commercial grade epoxy coated spray paint

Pipe Diameter

-

Add-in Options

MATERIAL	Post:Glass reinforced polyester
COATING	Commercial grade spray paint
NOZZLE	Brass C360



PROJECT NAME		DRAWN BY/ DATE	
SURFERS WAVE SLIDE		E.YAVUZ	
PROJECT NR.		REV	0.1
UNIT		CM/INCH	
SHEET		SHEET	



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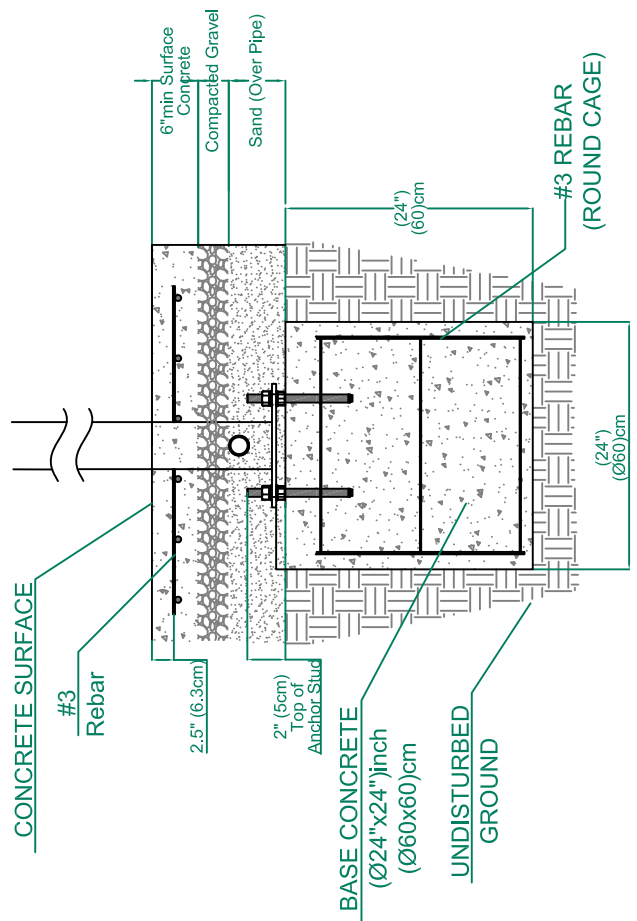
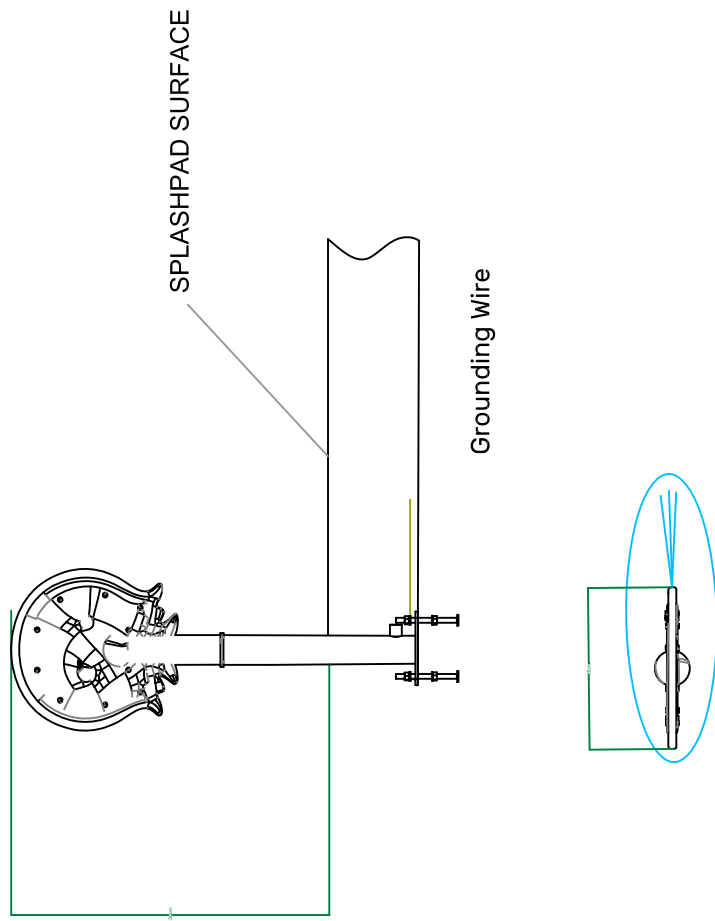
TURNER OCTOPUS S-04.23



360 rotation

Flow Rate	6-12 gpm - 22-44 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel and glass reinforced polyester material	Coating / Graphic Design UV and chemical resistant, oven cured, polyester powder coating. UV and chemical resistant, commercial grade epoxy coated spray paint.
Pressure	8-12 psi - 0.5-0.8 bar		
Height	51" - 130 cm		
Length	25" - 66 cm		
Width	5.5" - 14 cm		
Spray Zone	ø 83" - ø 211 cm		
		Play Zones	Pipe Diameter ø4" - ø115 mm
		Toddler Family Dynamic	Add-in Options
			 Removable

MATERIAL	Post : Stainless Steel 304/304L
	Octopus : Glass reinforced polyester
	OD :4.5" Sch 10 Tube
COATING	Oven Cured, Powder Paint
PRE - COATING	Sand Blasting
NOZZLE	Brass



PROJECT NAME	DRAWN BY/ DATE	
TURNER OCTOPUS	M.YALCINKAYA	
	PROJECT NR.	REV
		0.1
	UNIT	CM
	SHEET	



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AQUA PINE TREE S-01.02.04



Flow Rate 18-32 gpm - 68-121 lpm

Pressure 8-14 psi - 0.5-0.9 bar

Height 141" - 360 cm

Length -

Width 104.7" - 266 cm

Spray Zone ø144" - ø367 cm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L Stainless steel construction with brass nozzle with aluminium leaves

Play Zones

Toddler Family Dynamic

Coating / Graphic Design

UV and chemical resistant, oven cured, polyester powder coating

Pipe Diameter ø5" - ø140 mm

Add-in Options

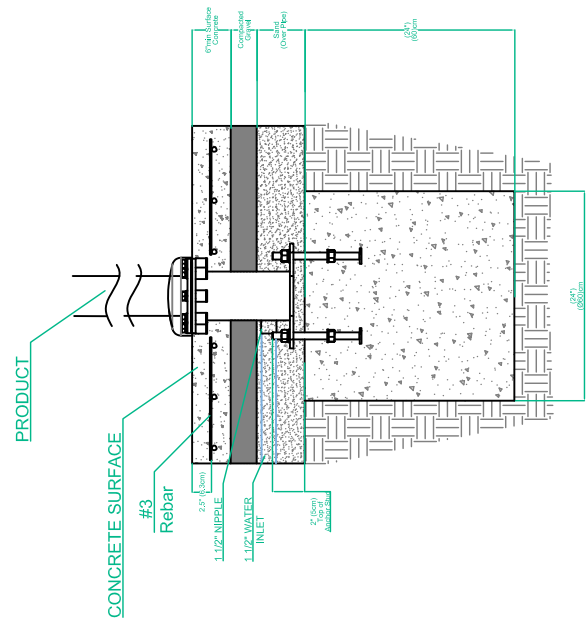
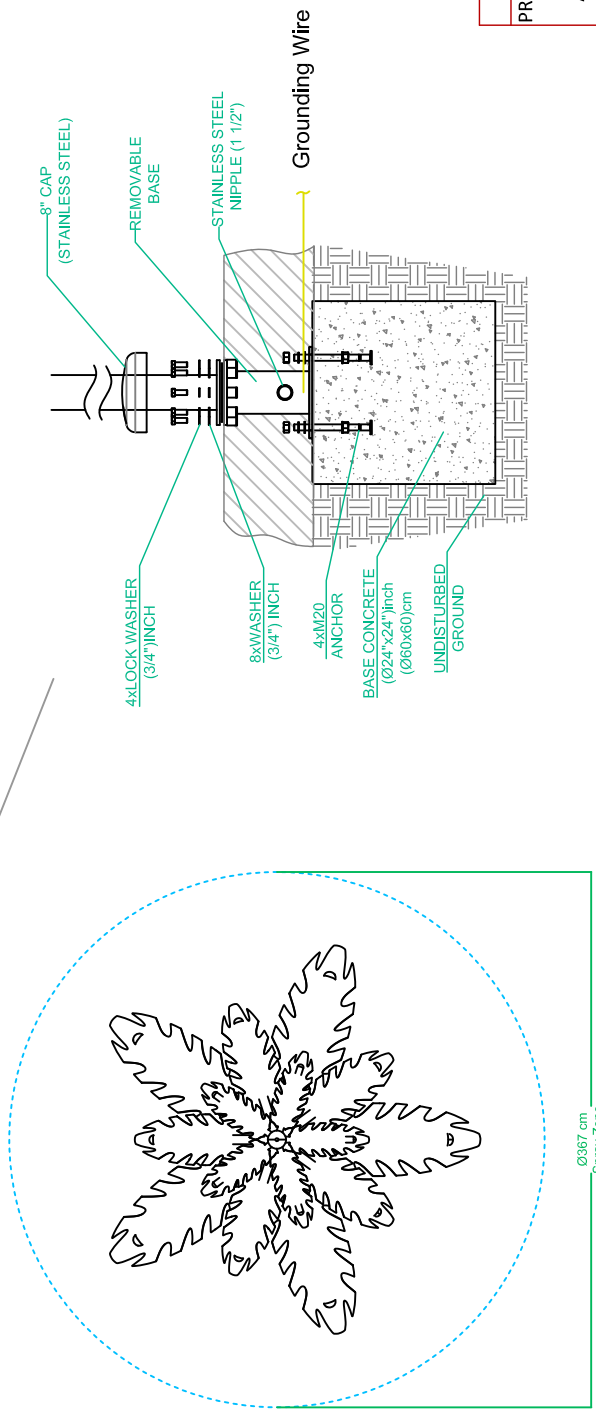
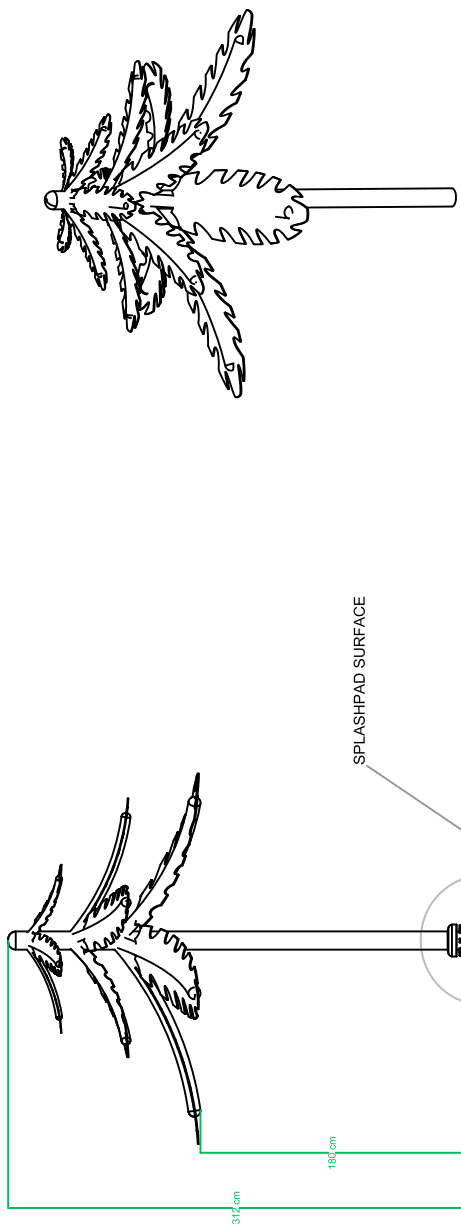


Activator



Removable

MATERIAL	Post: Stainless Steel 304/304L
COATING	Bucket: Glass reinforced polyester
PRF-COATING	OD: 5.5" Sch 10 Tube
NOZZLE	Oven Cured, powder paint
	Sand Blasting
	Brass C360



PROJECT NAME	AQUA PINE TREE	DRAWN BY/ DATE	I. UYGAR
		PROJECT NR.	
		REV	1

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UNIT	CM
SHEET	

FOUNTAIN ROCK MINI 1 - AQUA SHAPES S-02.36.10



Flow Rate 6 gpm - 27.2 lpm

Pressure 8-15 psi - 0.5-1 bar

Height 10" - 25 cm

Length -

Width 27" - 68 cm

Spray Zone ø83" - ø211 cm

Material Detail

Commercial grade, non corrosive, UV and chemical resistant, glass reinforced polyester material with brass nozzle

Play Zones

Toddler **Family** Dynamic

Coating / Graphic Design

UV and chemical resistant, commercial grade epoxy coated spray paint

Pipe Diameter -

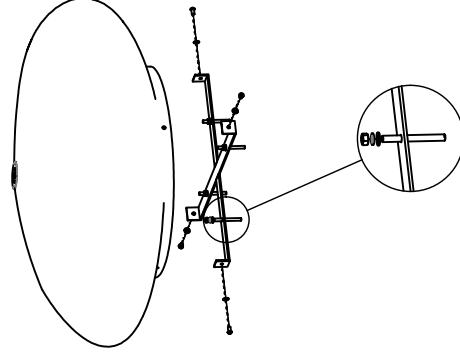
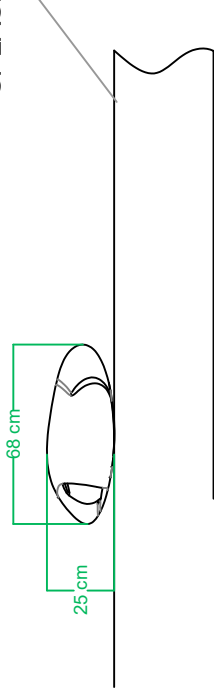
Add-in Options



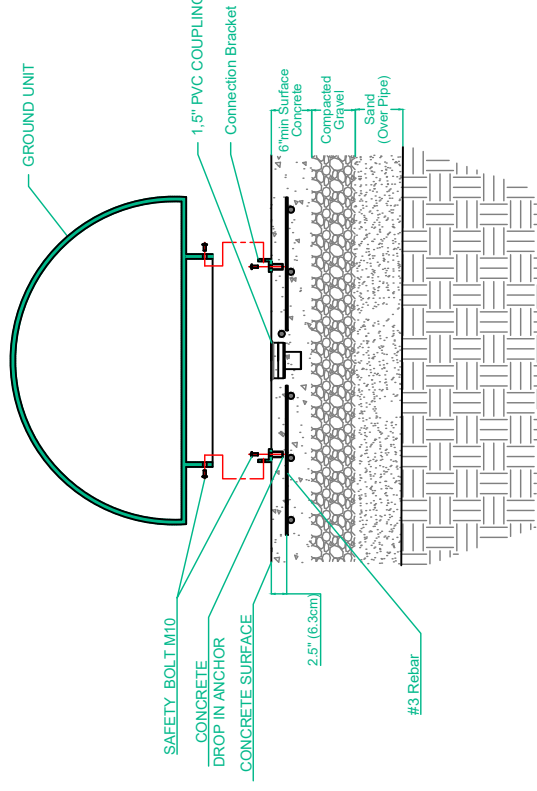
Removable

MATERIAL	Post:Glass reinforced polyester
COATING	Commercial grade spray paint
NOZZLE	Brass C360

SPLASHPAD SURFACE



INSTALLATION DETAIL



PROJECT NAME

DRAWN BY/ DATE

FOUNTAIN ROCK MINI I

i. UYGAR

PROJECT NR.

REV

1



WATER SPLASH INC.

UNIT
CM

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SHEET

1

FOUNTAIN ROCK MINI 2 - AQUA SHAPES S-02.36.11



Flow Rate 5 gpm - 22.7 lpm

Pressure 8-15 psi - 0.5-1 bar

Height 10" - 25 cm

Length -

Width 27" - 68 cm

Spray Zone ø83" - ø211 cm

Material Detail

Commercial grade, non corrosive, UV and chemical resistant, glass reinforced polyester material with brass nozzle

Play Zones

Toddler **Family** Dynamic

Coating / Graphic Design

UV and chemical resistant, commercial grade epoxy coated spray paint

Pipe Diameter -

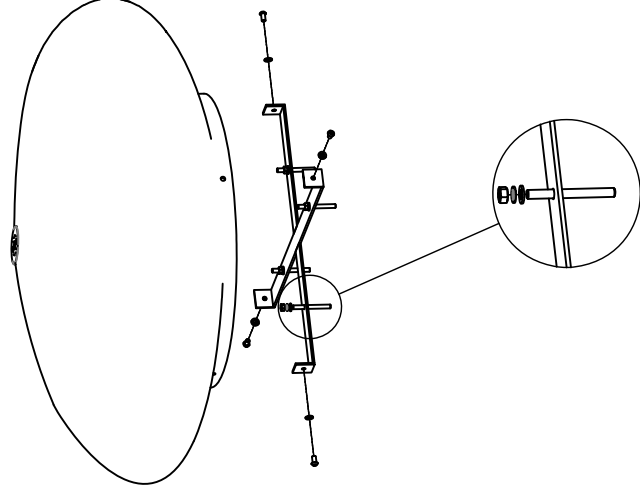
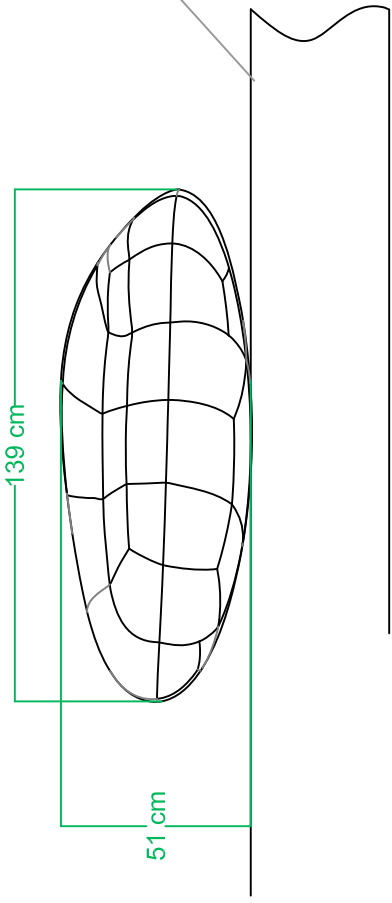
Add-in Options



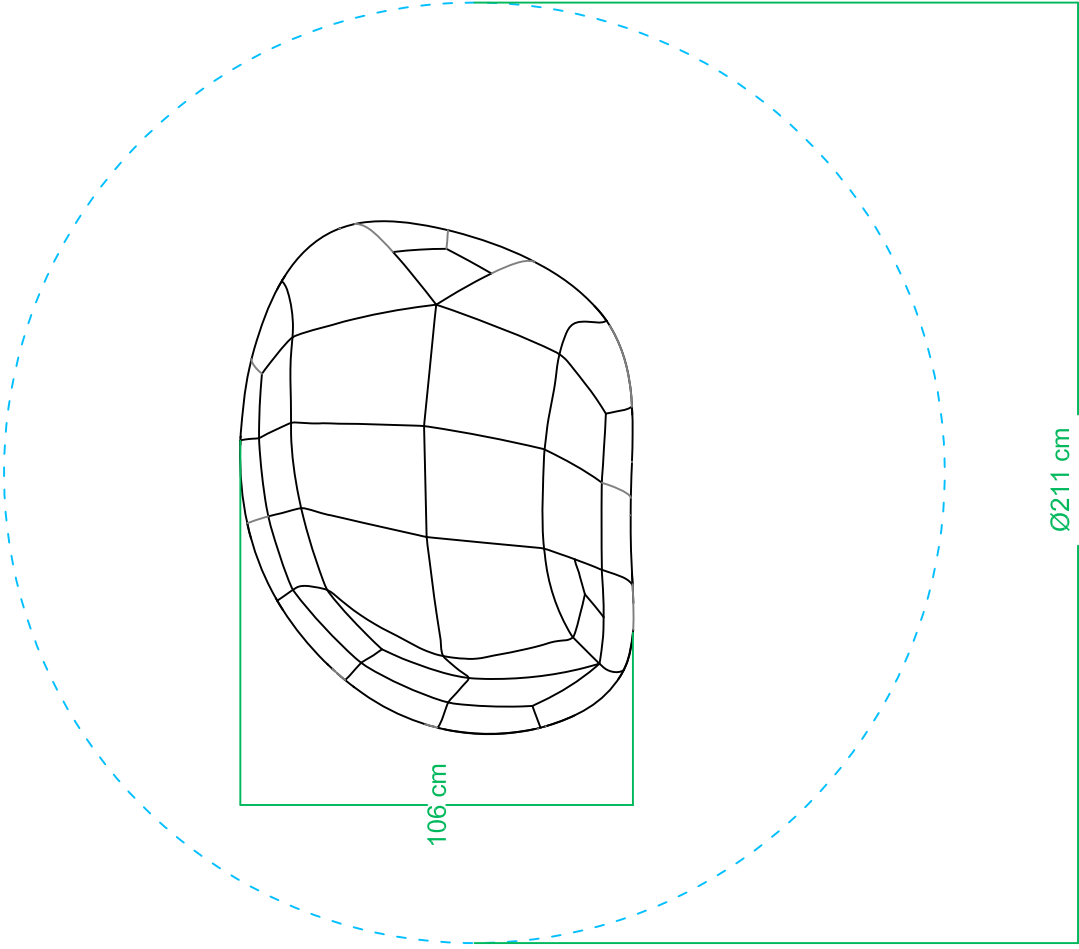
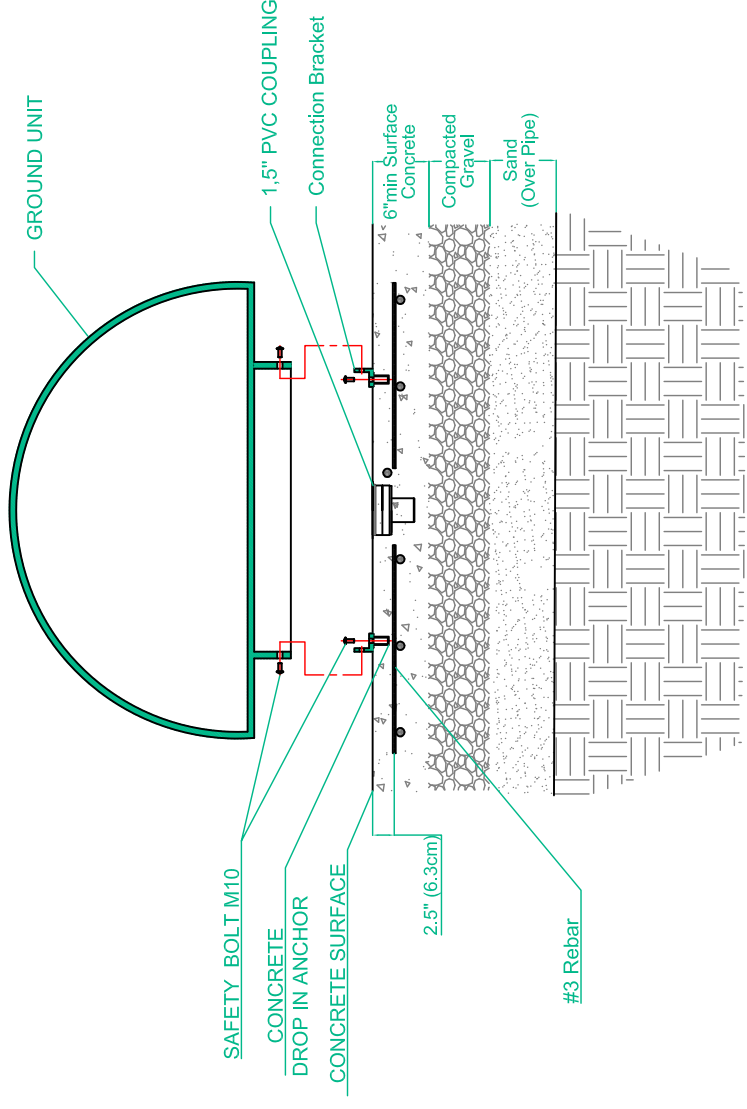
Removable

MATERIAL	Post-Glass reinforced polyester
COATING	Commercial grade spray paint
NOZZLE	Brass C360

SPLASHPAD SURFACE



INSTALATION DETAIL



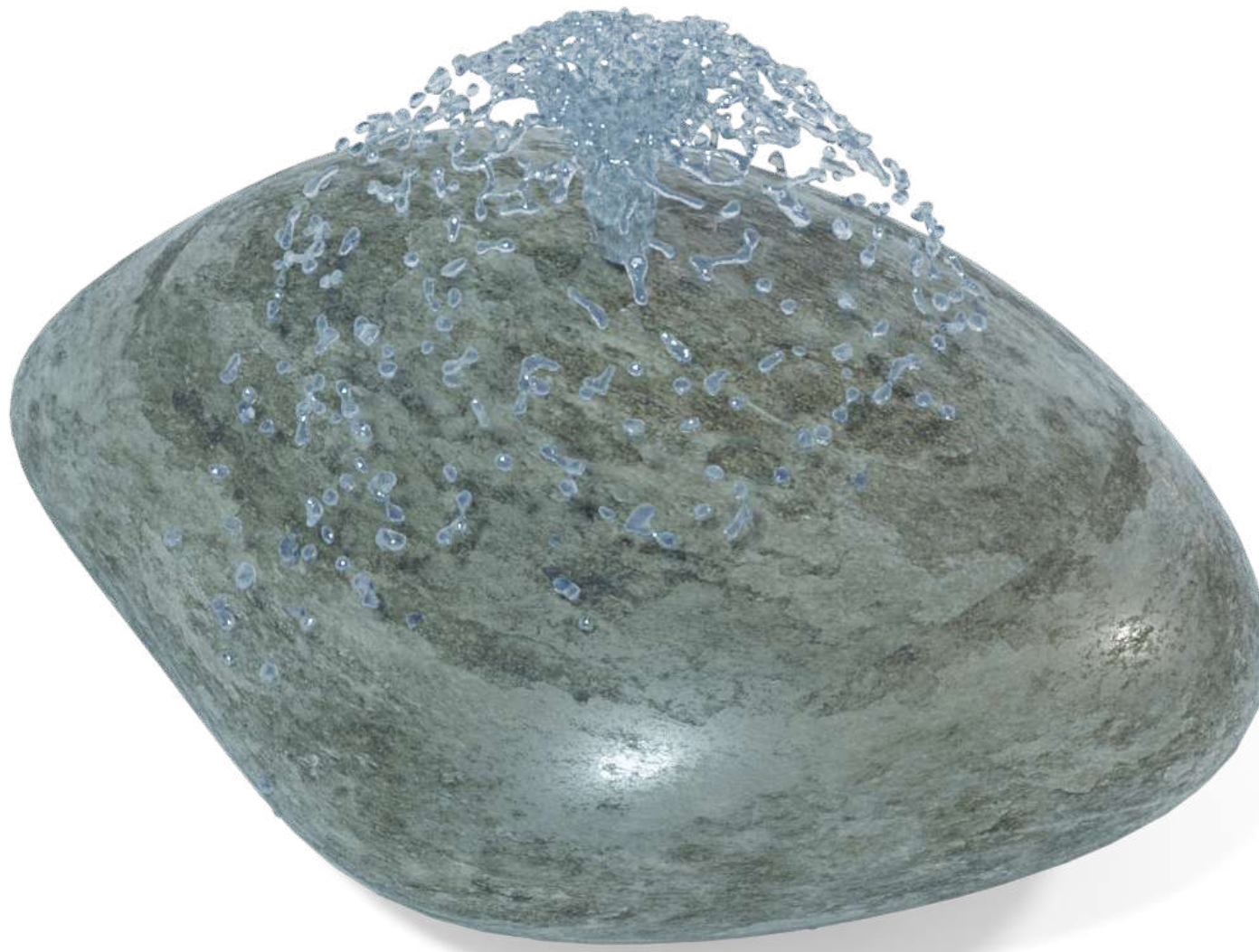
PROJECT NAME	FOUNTAIN ROCK II - AQUA SHAPES		
DRAWN BY/ DATE	i. UYGAR		
PRODUCT NO	S-02.36.11	REV	1
UNIT	CM	SHEET	CM



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FOUNTAIN ROCK MINI 3 - AQUA SHAPES S-02.36.12



Flow Rate 5 gpm - 22.7 lpm

Pressure 8-15 psi - 0.5-1 bar

Height 10" - 25 cm

Length -

Width 27" - 68 cm

Spray Zone ø83" - ø211 cm

Material Detail

Commercial grade, non corrosive, UV and chemical resistant, glass reinforced polyester material with brass nozzle

Play Zones

Toddler **Family** Dynamic

Coating / Graphic Design

UV and chemical resistant, commercial grade epoxy coated spray paint

Pipe Diameter -

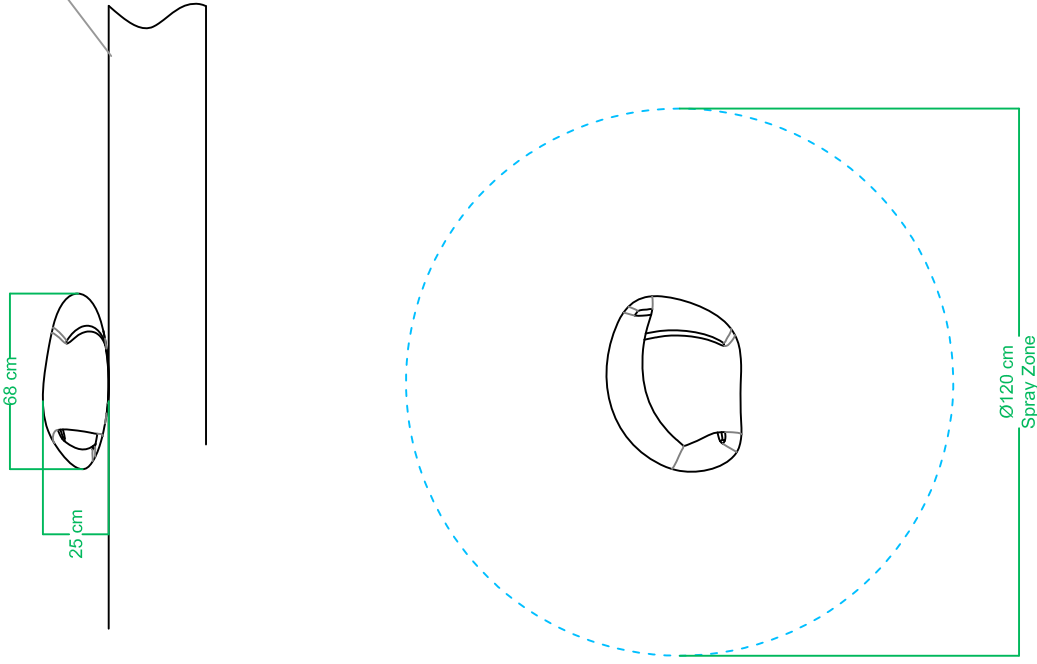
Add-in Options



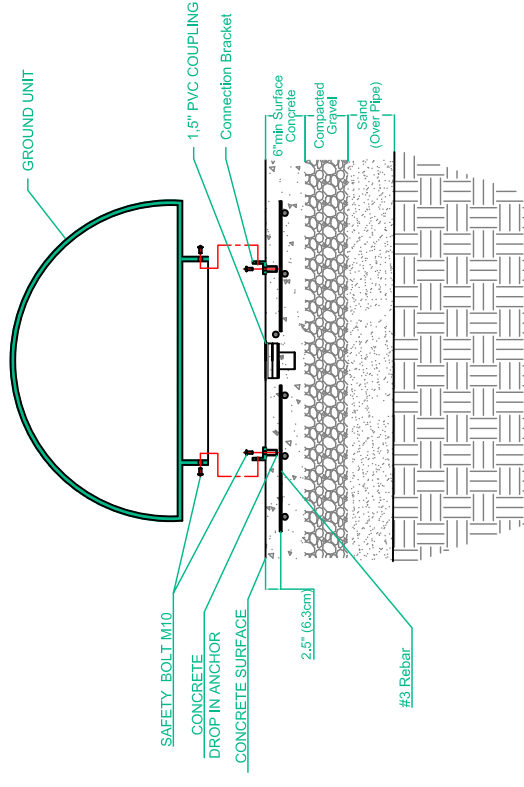
Removable

MATERIAL	Post-Glass reinforced polyester
COATING	Commercial grade spray paint
NOZZLE	Brass C360

SPLASHPAD SURFACE



INSTALATION DETAIL



PROJECT NAME

FOUNTAIN ROCK MINI III

DRAWN BY/ DATE

I. UYGAR

PROJECT NR.

REV

1



WATER SPLASH INC.

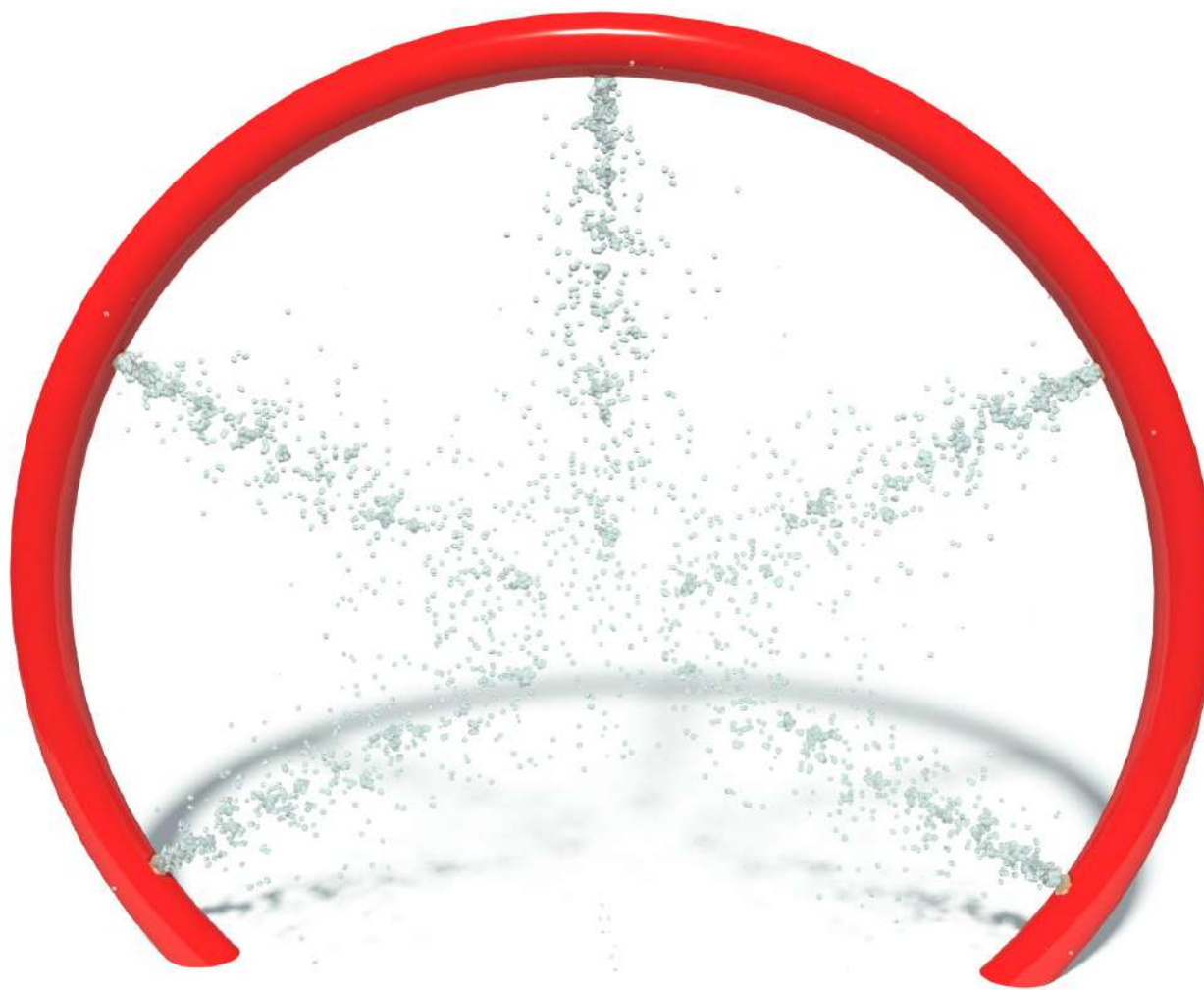
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UNIT

CM

SHEET

AQUA LOOP S-03.02



Flow Rate 10-12 gpm - 37-40 lpm

Pressure 8-12 psi - 0.6 bar

Height 79" - 200 cm

Length -

Width 79" - 200 cm

Spray Zone ø144" - ø365 mm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzles

Play Zones

Toddler Family Dynamic

Coating / Graphic Design

UV and chemical resistant, oven cured, polyester powder coating

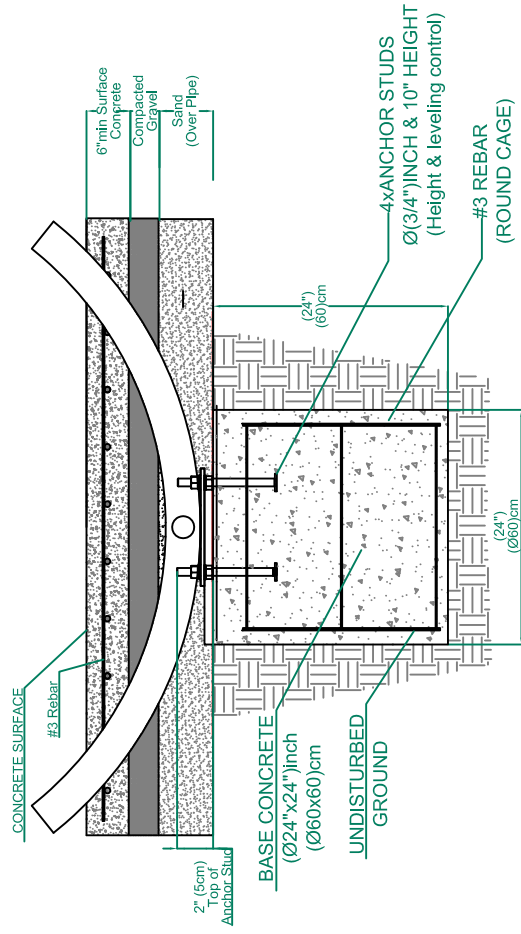
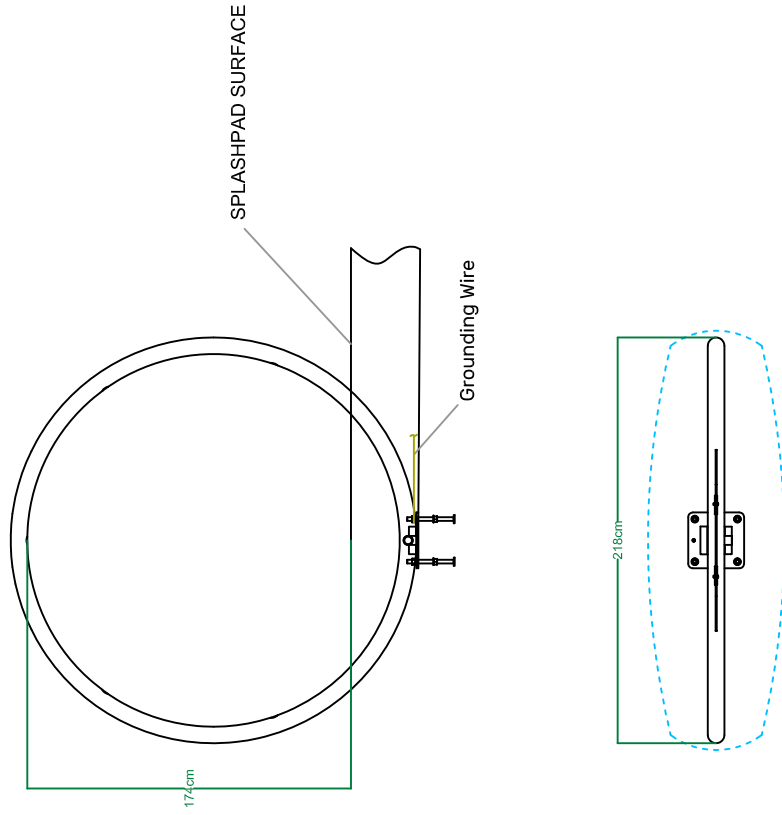
Pipe Diameter ø3" - ø90 mm

Add-in Options



Removable

MATERIAL	Post-Stainless Steel 304/304L
COATING	OD: 3.5" Sch 10 Tube
PRE-COATING	Oven Cured, powder paint
NOZZLE	Sand Blasting
	Brass C360



PROJECT NAME	AQUA LOOP	
DRAWN BY/ DATE	E. YAVUZ	
REV	PROJECT NR.	0.1
UNIT	CM	SHEET





WATER SPLASH INC.

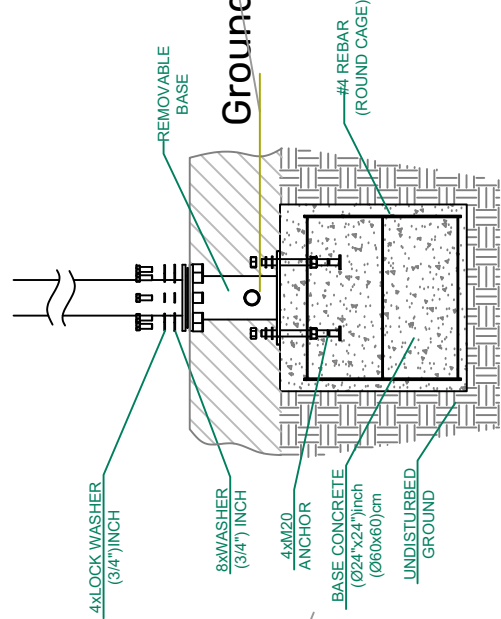
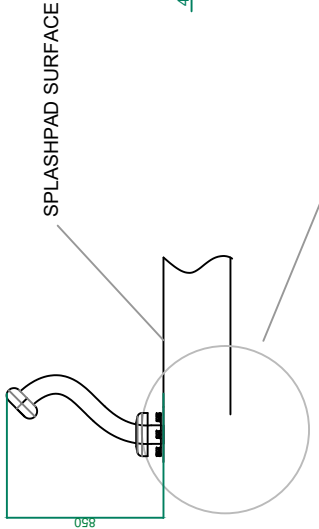
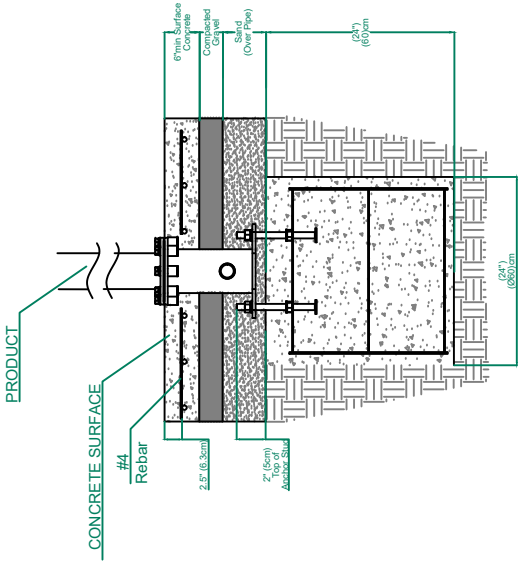
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360 rotation

Flow Rate	7-11 gpm - 26-41 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzle	Coating / Graphic Design	
Pressure	8-12 psi - 0.5-0.8 bar		UV and chemical resistant, oven cured, polyester powder coating	
Height	37.4" - 95 cm		Pipe Diameter	ø4" - ø115 mm
Length			Add-in Options	
Width	13.3" - 34 cm			
Spray Zone	ø100" - ø254 cm		Activator Removable	
		Play Zones		
		Toddler Family Dynamic		

MATERIAL	Post: Stainless Steel 304/304L
	Bucket: Glass reinforced polyester
	OD: 5.5" Sch 10 Tube
COATING	Oven Cured, powder paint
PRE-COATING	Sand Blasting
NOZZLE	Brass C360



Grounding Wire



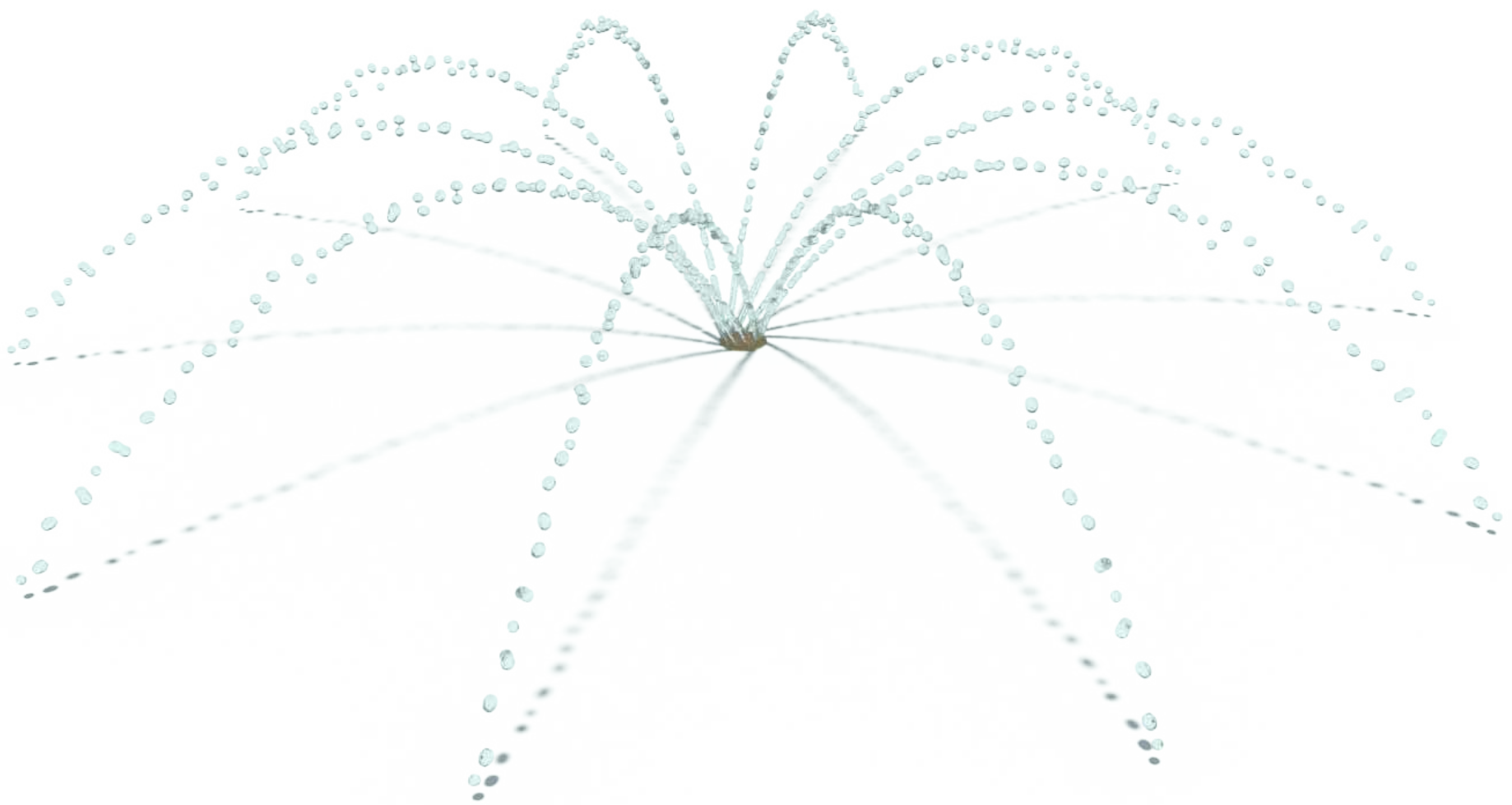
PROJECT NAME	DRAWN BY/ DATE	
	V.RENCBER	
WAVY CANNON	PROJECT NR.	REV
		0.1
	UNIT	SHEET
	MM	





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SPIDER TWIST S-05.22.03



Flow Rate	5-7 gpm - 19-26 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzle	Coating / Graphic Design		
Pressure	14-18 psi - 1 bar		-		
Height	-		Add-in Options		
Width	-	Play Zones			
Spray Zone	ø65" - ø165 cm	Toddler	Family	Dynamic	 Led Lighting  Removable

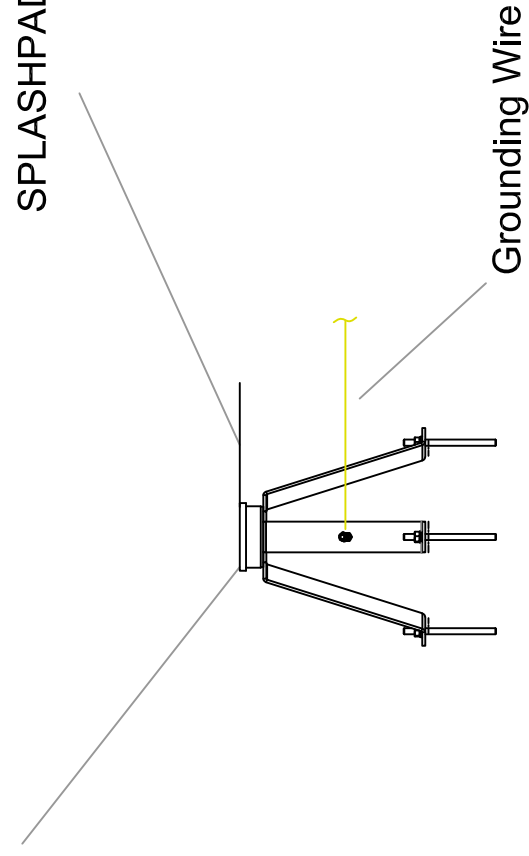
MATERIAL

Post:Stainless Steel 304/304L

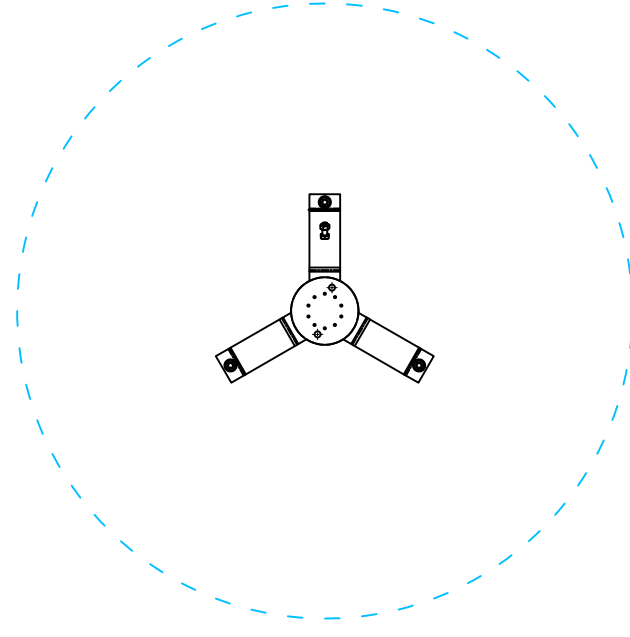
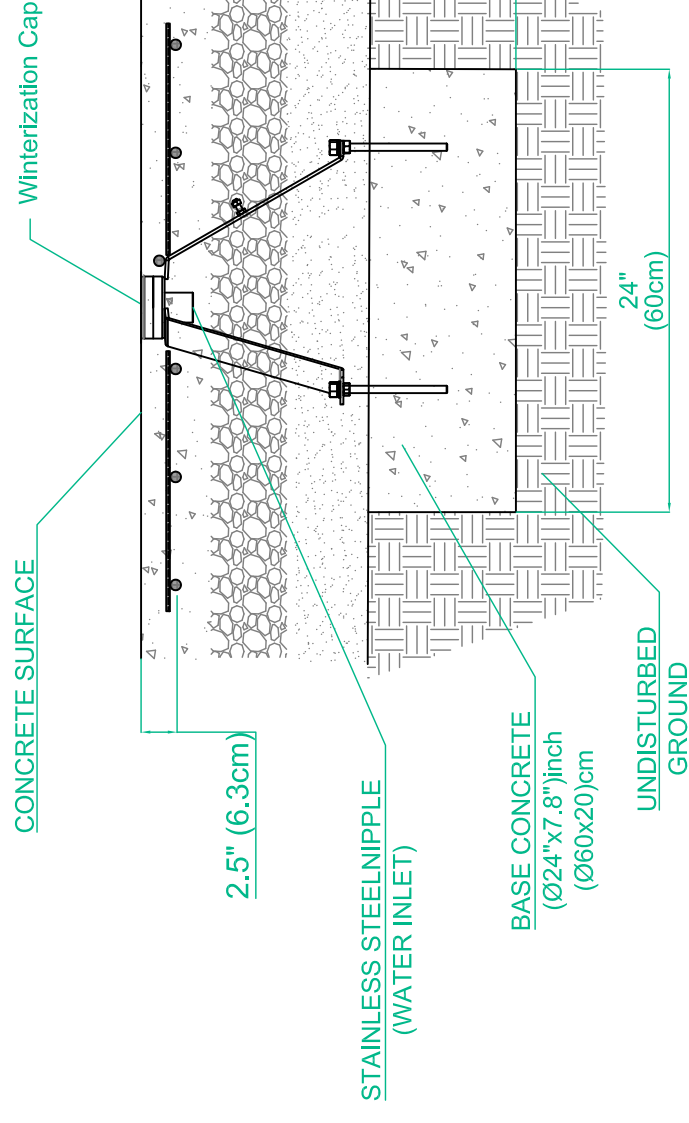
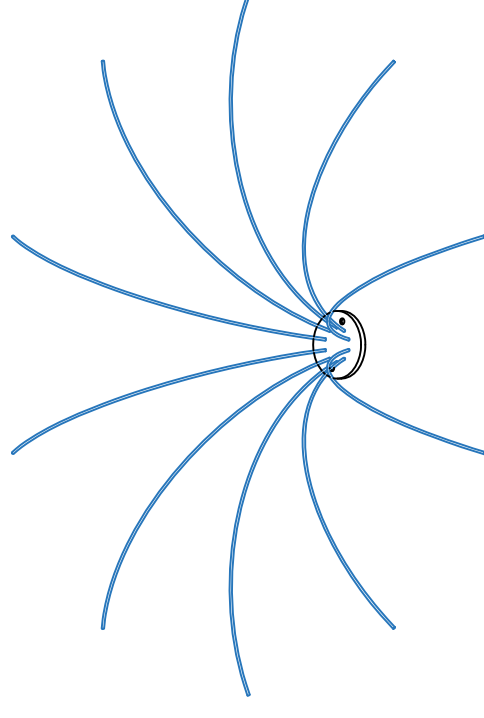
NOZZLE

Brass C360

REMOVABLE BRASS NOZZLE



SPLASHPAD SURFACE



PROJECT NAME

SPIDERTWIST

DRAWN BY/ DATE

i. UYGAR

PRODUCT NO

S-05.22.03

REV

0.1



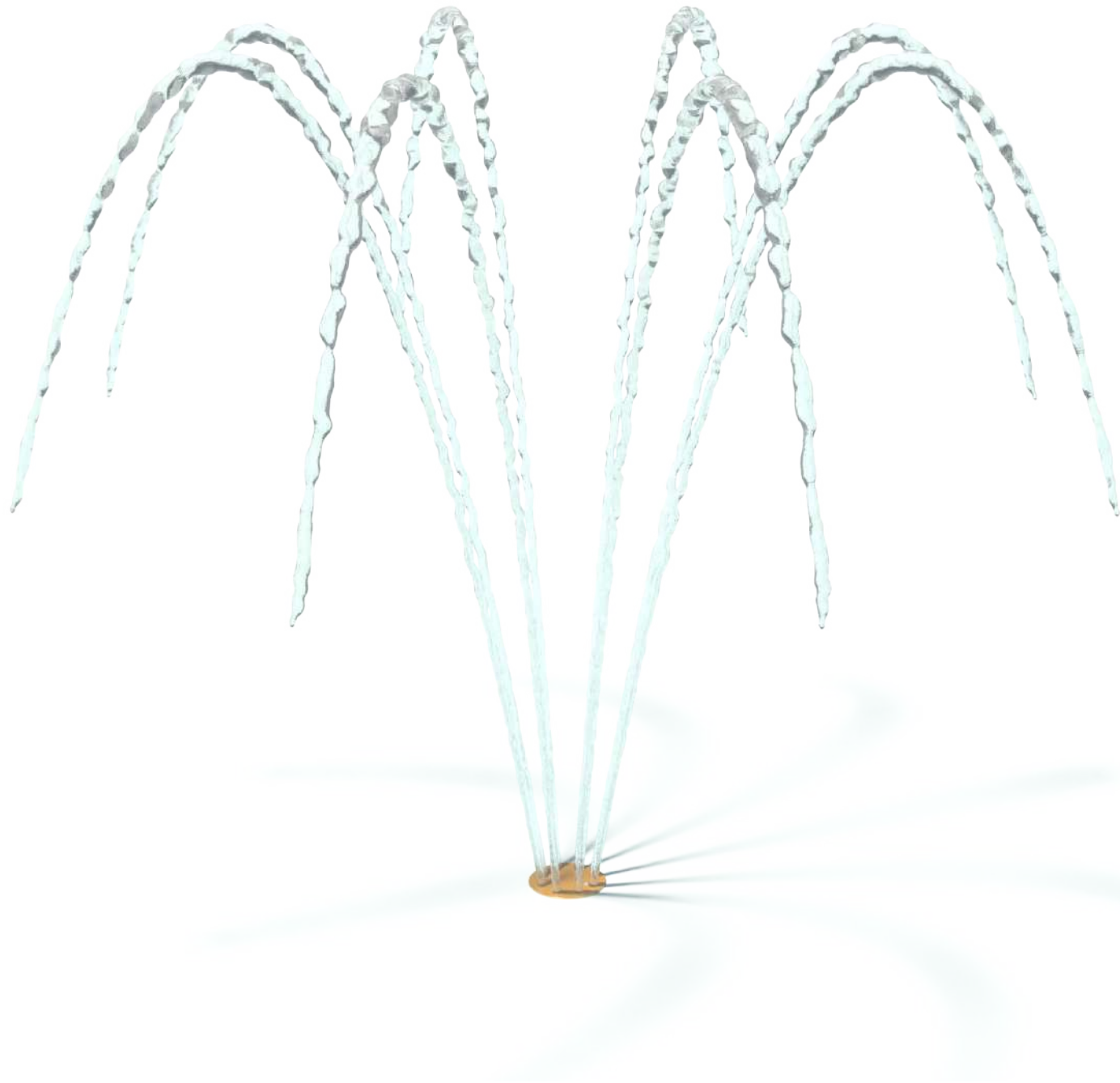
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UNIT

CM

SHEET



Flow Rate

5-7 gpm - 19-26 lpm

Pressure

4-8 psi - 0.3-0.5 bar

Height

-

Width

-

Spray Zone

ø83" - ø211 cm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzle

Play Zones

Toddler

Family

Dynamic

Coating / Graphic Design

-

Add-in Options



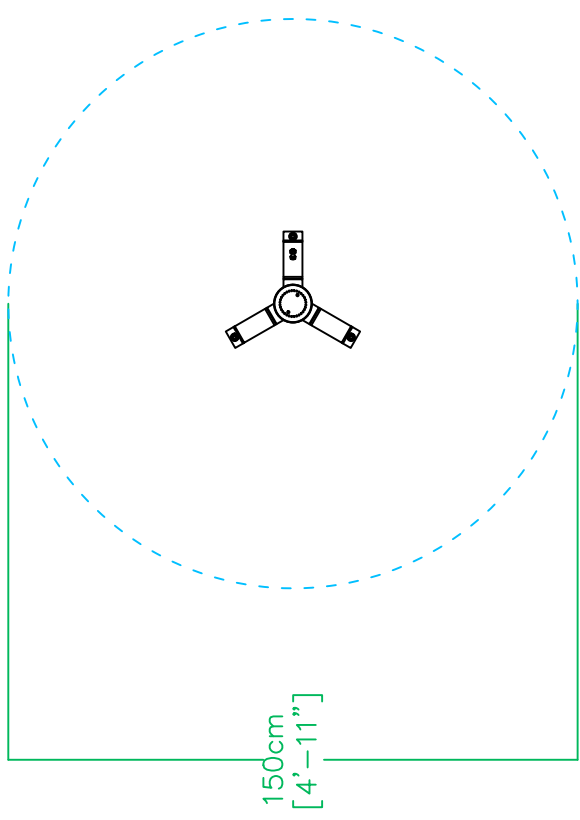
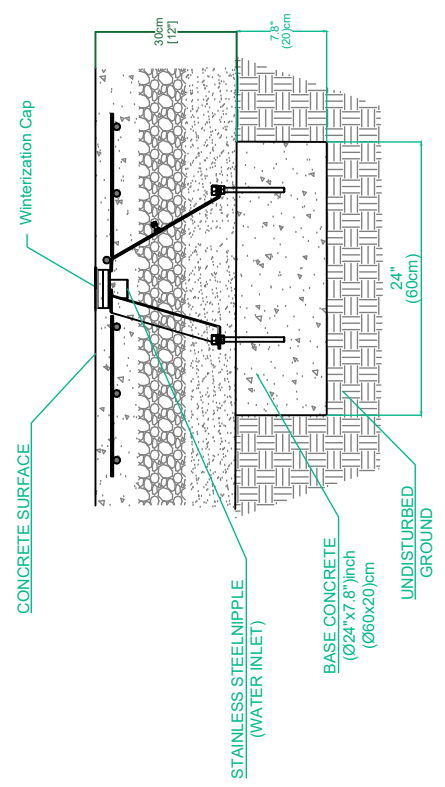
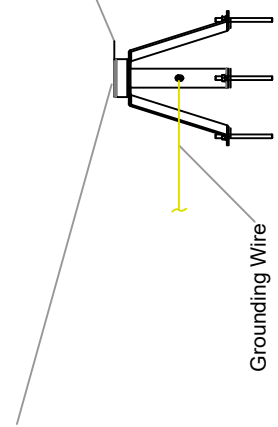
Led Lighting



Removable

MATERIAL	Post-Stainless Steel 304/304L
NOZZLE	Brass C360

REMOVABLE BRASS NOZZLE SPLASHPAD SURFACE





PROJECT NAME	AQUA RUSH
DRAWN BY/ DATE	E. YAVUZ
REV	PROJECT NR.
0.1	
UNIT	CM/INCH
SHEET	



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AQUA JET VERTICAL S-05.01.04

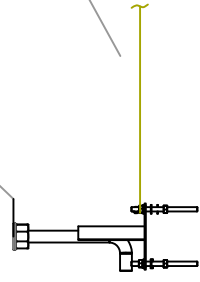


Flow Rate	3-4 gpm- 11-15 lpm	Material Detail	Coating / Graphic Design
Pressure	4-6 psi - 0.3-0.8 bar	Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass directional nozzle	-
Height	-	Play Zones	Add-in Options
Width	-	Toddler Family Dynamic	 Led Lighting  Removable
Spray Zone	ø50" - ø127cm		

MATERIAL
NOZZLE

Post:Stainless Steel 304/304L
Brass C360

SPLASHPAD SURFACE

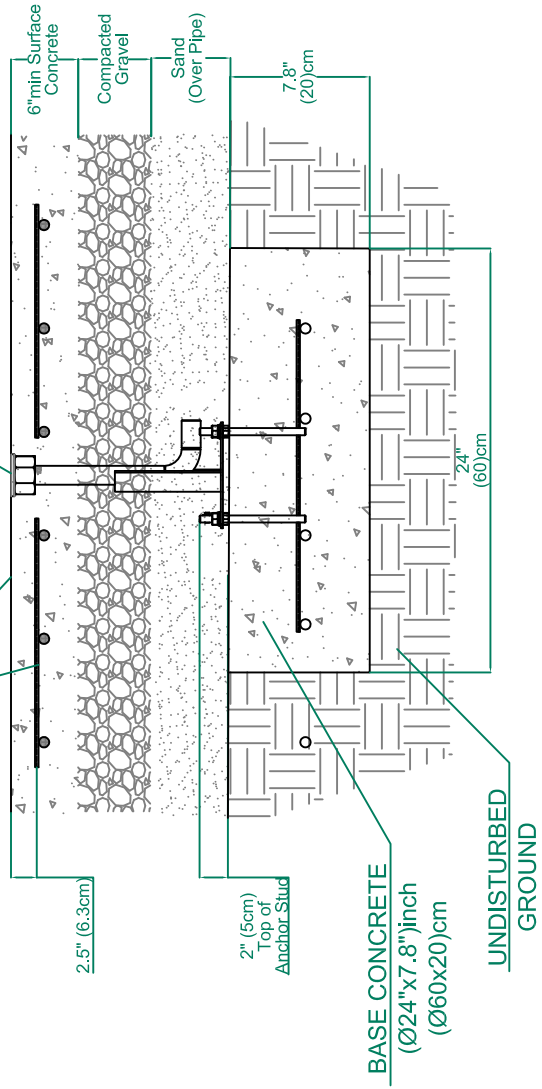


Grounding Wire

CONCRETE SURFACE

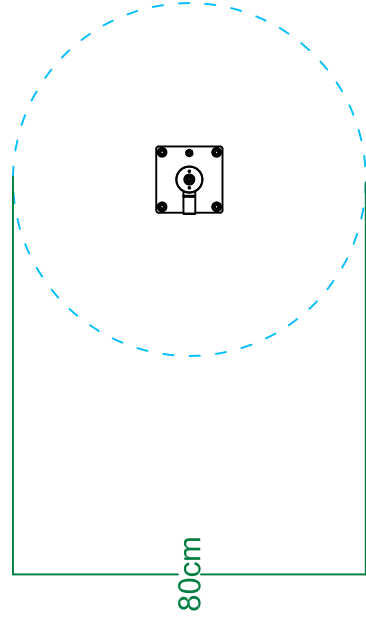
#3 Rebar

Winterization Cap



BASE CONCRETE
Ø24" x 7.8" inch
Ø60x20) cm

UNDISTURBED
GROUND



80cm

PROJECT NAME

AQUA JET VERTICAL

DRAWN BY/ DATE

M.KOCA

PROJECT NR.

REV

0.1

UNIT

mm

SHEET



WATER SPLASH INC.

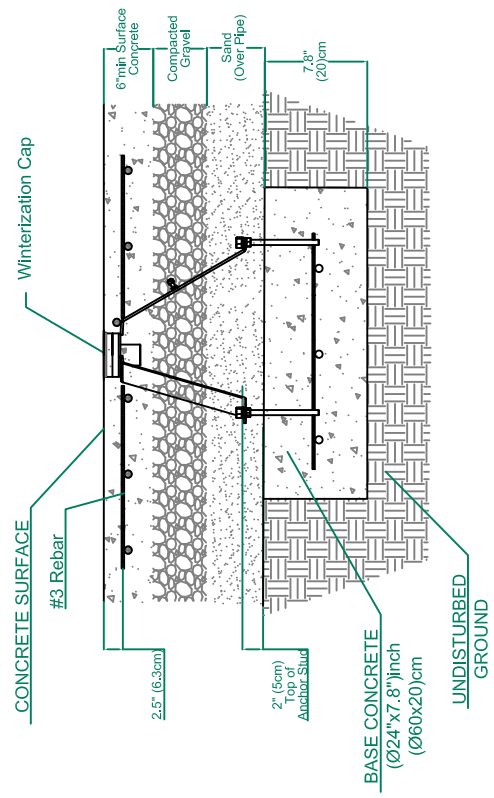
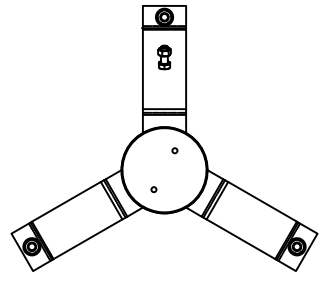
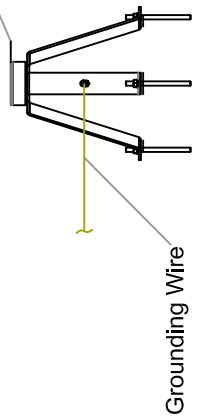
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Flow Rate	4-6 gpm- 15-23 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzle	Coating / Graphic Design	
Pressure	5-6 psi - 0.3-0.4 bar		-	
Height	-		Add-in Options	
Width	-	Play Zones		
Spray Zone	ø90" - ø229 cm	Toddler Family Dynamic	Led Lighting	Removable

MATERIAL	Post-Stainless Steel 304/304L
NOZZLE	Brass C360



SPLASHPAD SURFACE



PROJECT NAME AQUA SPLIT	DRAWN BY/ DATE M. KOCA
	PROJECT NR.
REV 0.1	UNIT CM
WATER SPLASH INC.	
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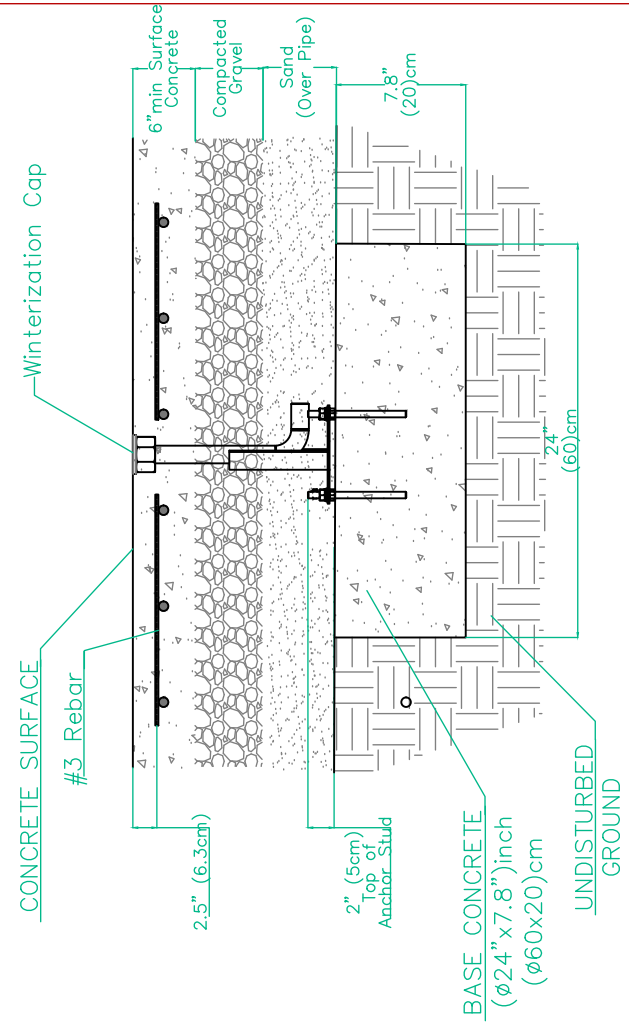
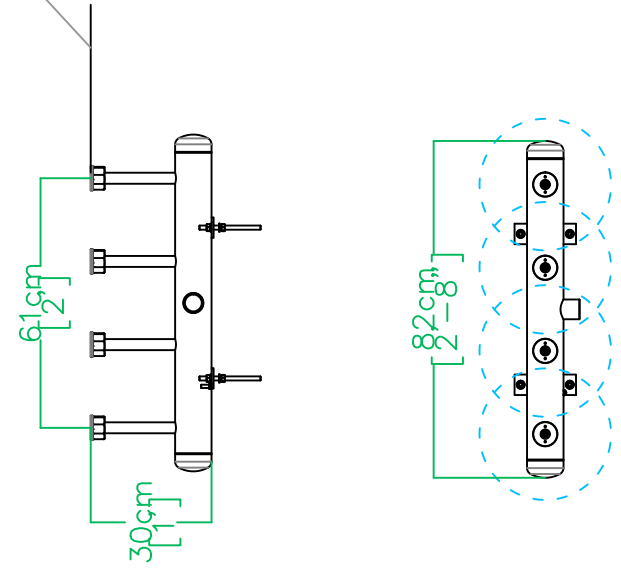
AQUA TUNNEL JR S-05.05.02




Flow Rate	8-12 gpm - 30-45 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzles	Coating / Graphic Design	
Pressure	4-8 psi - 0.3-0.5 bar		-	
Height	-			
Width	-	Play Zones Toddler Family Dynamic	Add-in Options	
Spray Zone	ø70" - ø178 cm		 Activator	 Led lighting



MATERIAL	Post:Stainless Steel 304/304L
NOZZLE	Brass C360

SPLASHPAD SURFACE



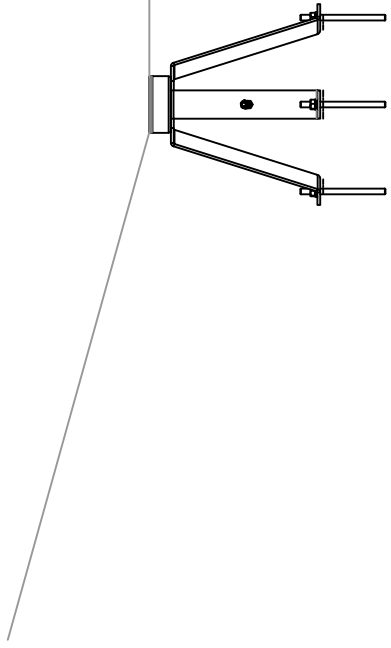
PROJECT NAME	AQUA TUNNEL JR.		DRAWN BY/ DATE	E.YAVUZ
REV	0.1	PROJECT NR.		
UNIT	CM/INCH	UNIT		
SHEET		SHEET		
 WATER SPLASH INC.				
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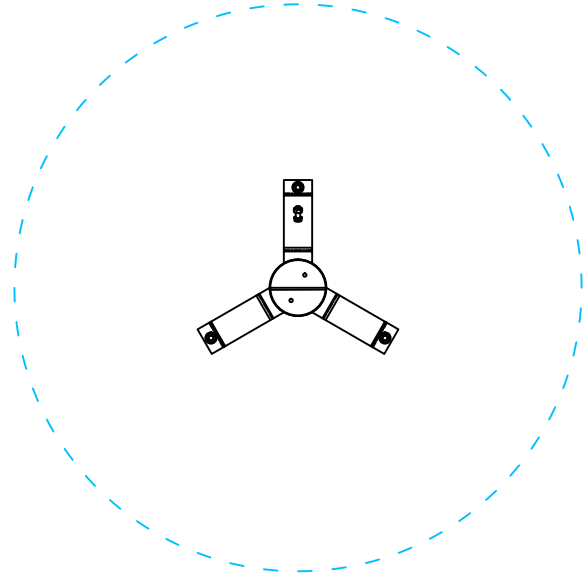
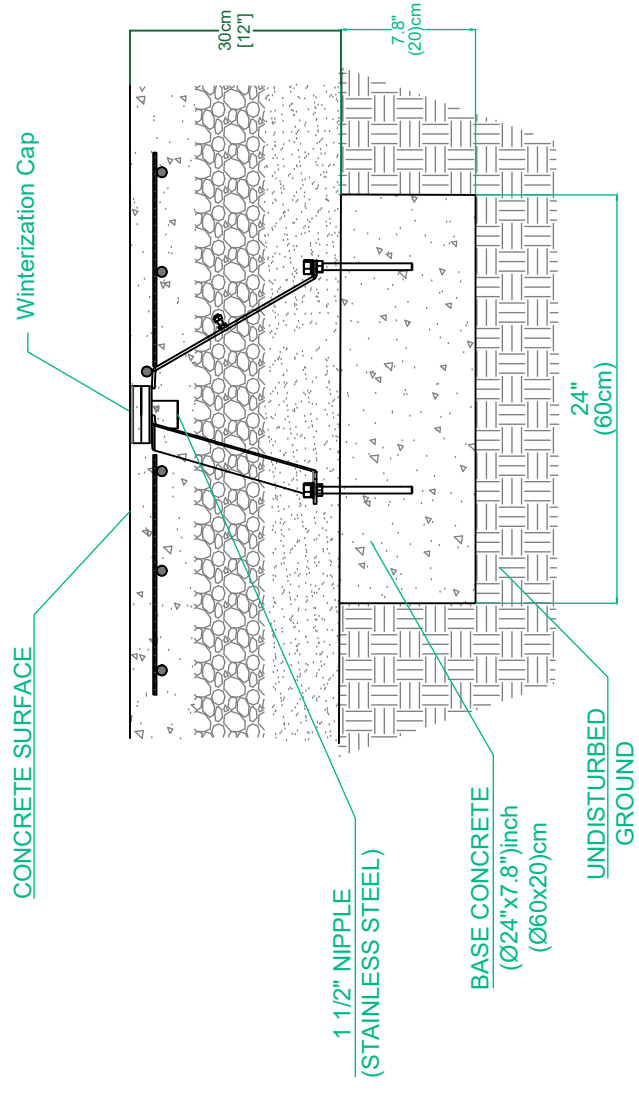
Flow Rate	3-5 gpm- 11-19 lpm	Material Detail	Coating / Graphic Design
Pressure	4-8 psi - 0.24-0.55 bar	Commercial, non corrosive, chemical resistant 304/304L Stainless steel construction with brass nozzle	-
Height	-	Play Zones	Add-in Options
Width	-	Toddler Family Dynamic	 Led Lighting  Removable
Spray Zone	ø65" - ø165 cm		

MATERIAL	Post:Stainless Steel 304/304L
NOZZLE	Brass C360

REMOVABLE BRASS NOZZLE



SPLASHPAD SURFACE



PROJECT NAME	DRAWN BY/ DATE	
	E.YAVUZ	
STREAM JET	PROJECT NR.	REV
		0.1
UNIT		CM/INCH
SHEET		



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AQUA LEAF I S-97.01.04



Flow Rate 10-15 gpm - 37-56 lpm

Pressure 8-15 psi - 0.6 bar

Height 108" - 275 cm

Length -

Width 50" - 127 cm

Spray Zone ø118" - ø300 cm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzles and polycarbonate

Play Zones

Toddler Family Dynamic

Coating / Graphic Design

UV and chemical resistant, oven cured, polyester powder coating

Pipe Diameter ø3" - ø90 mm

Add-in Options

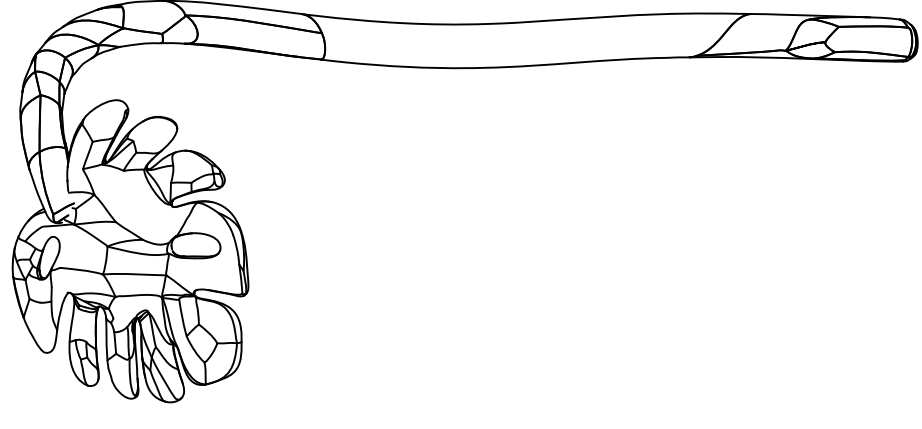
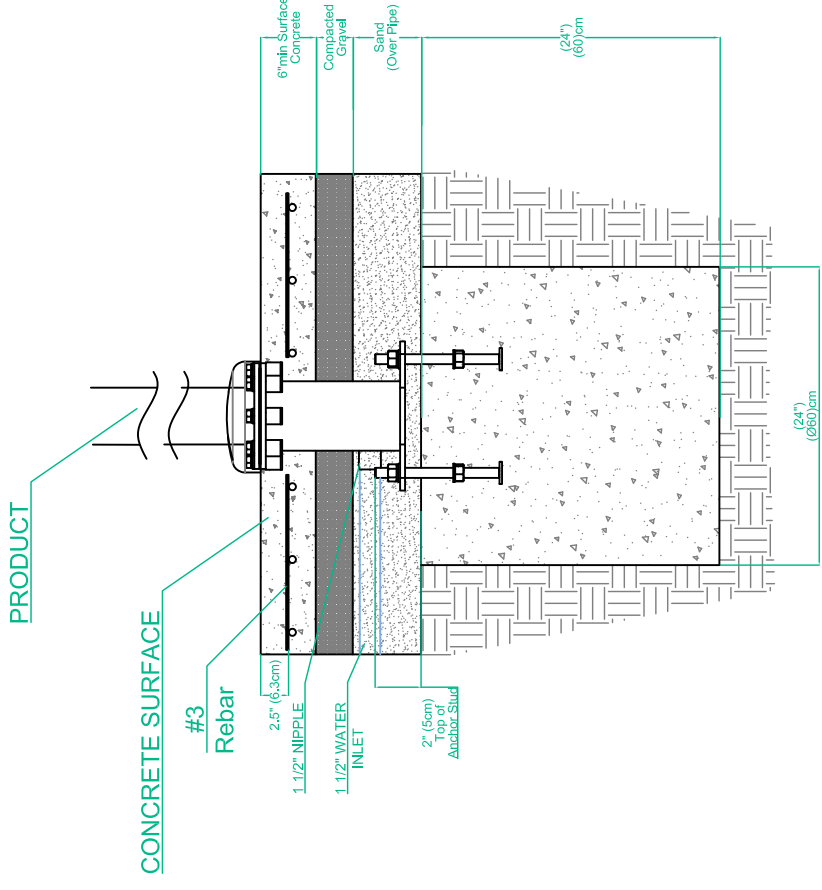


Activator

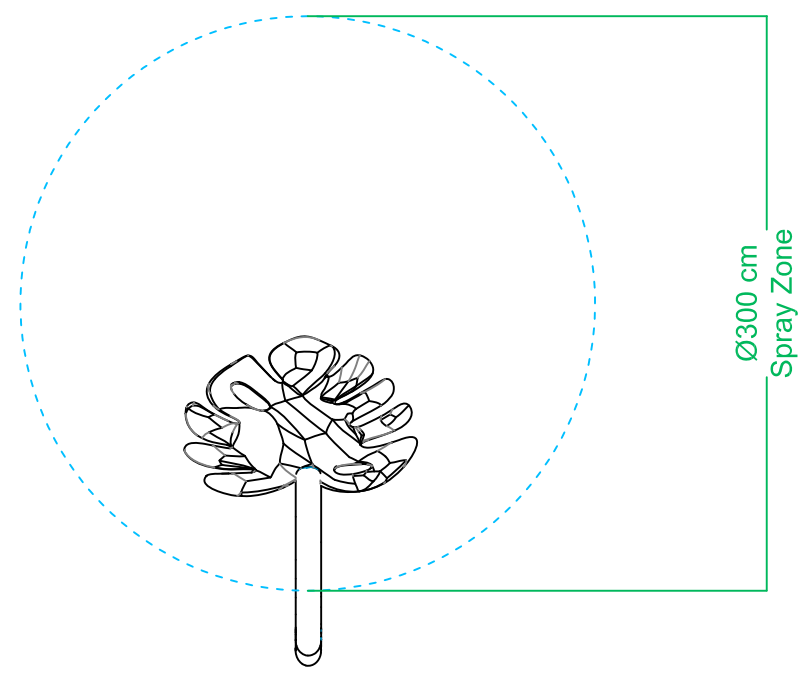
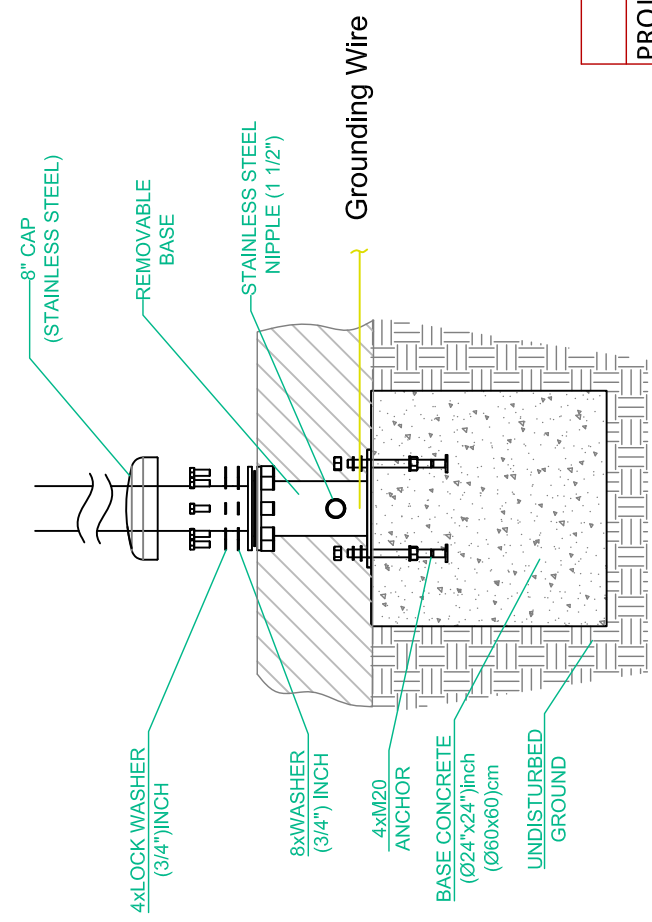
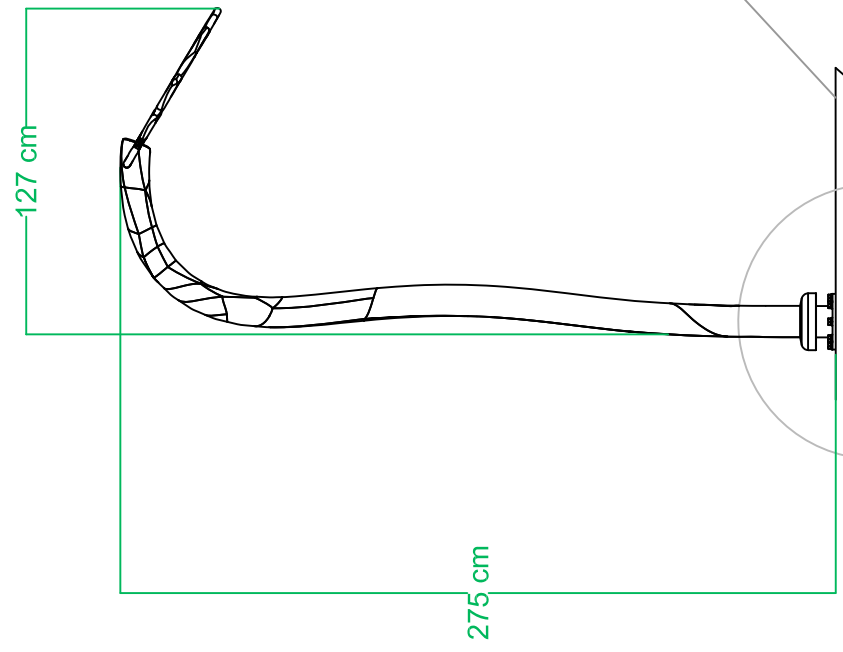


Removable

MATERIAL	Post : Stainless Steel 304/304L
	Top : Translucent Engineering Plastic
	OD : 3" Sch 10 Tube
COATING	Oven Cured, Powder Paint
PRE - COATING	Sand Blasting
NOZZLE	Brass



SPLASHPAD SURFACE



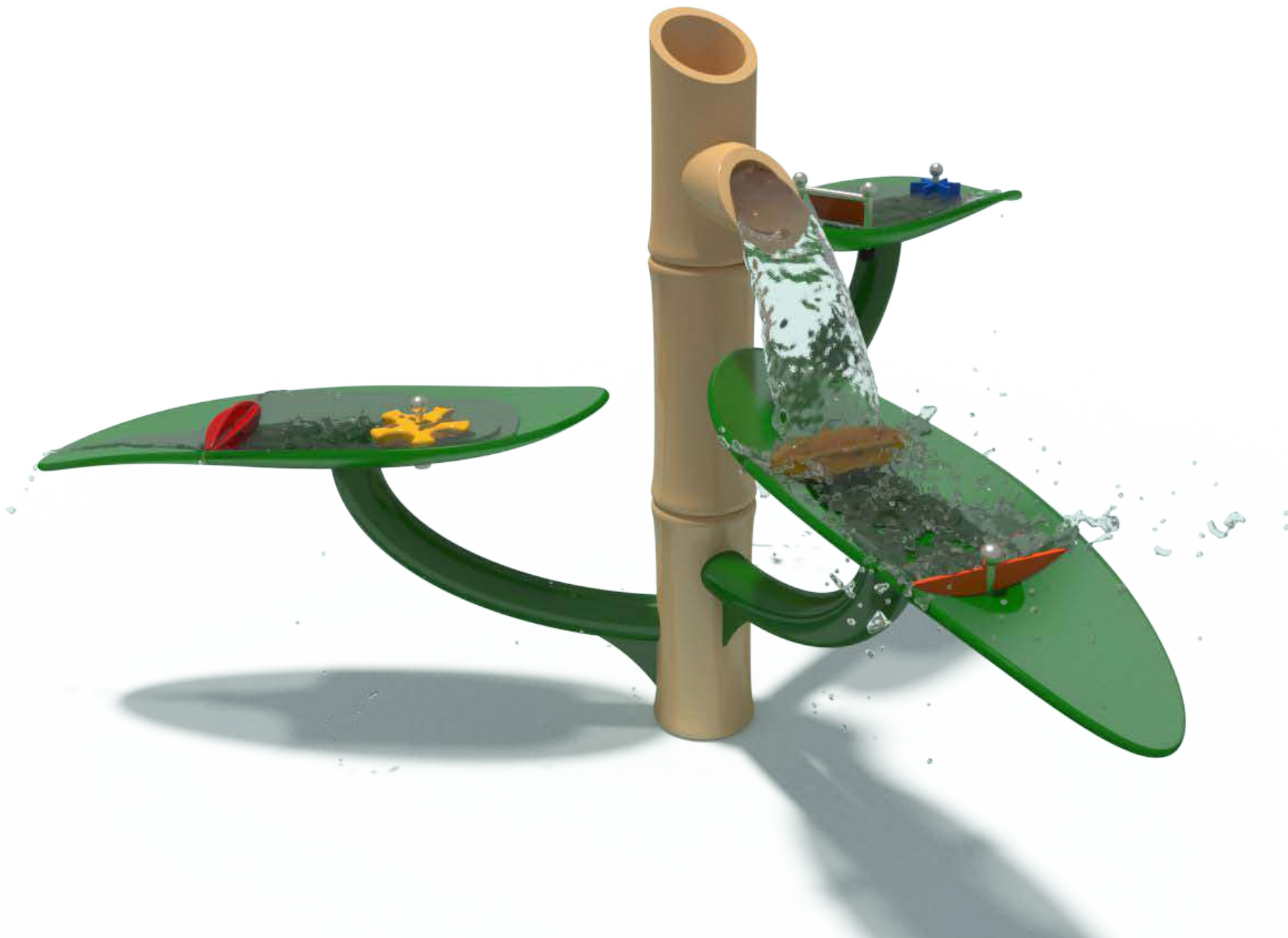
PROJECT NAME	DRAWN BY/ DATE	
AQUA LEAF	i. UYGAR	
	PRODUCT NO	REV
	S-97.01.04	0.1
	UNIT	SHEET
	CM	



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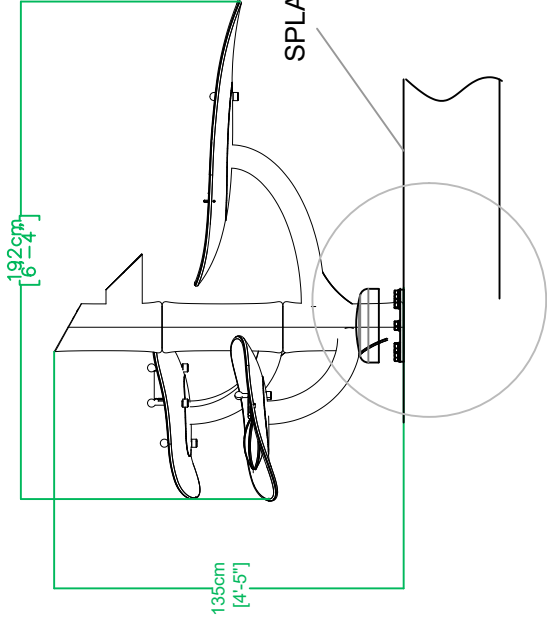
AQUA ACCENTS II S-97.10.04



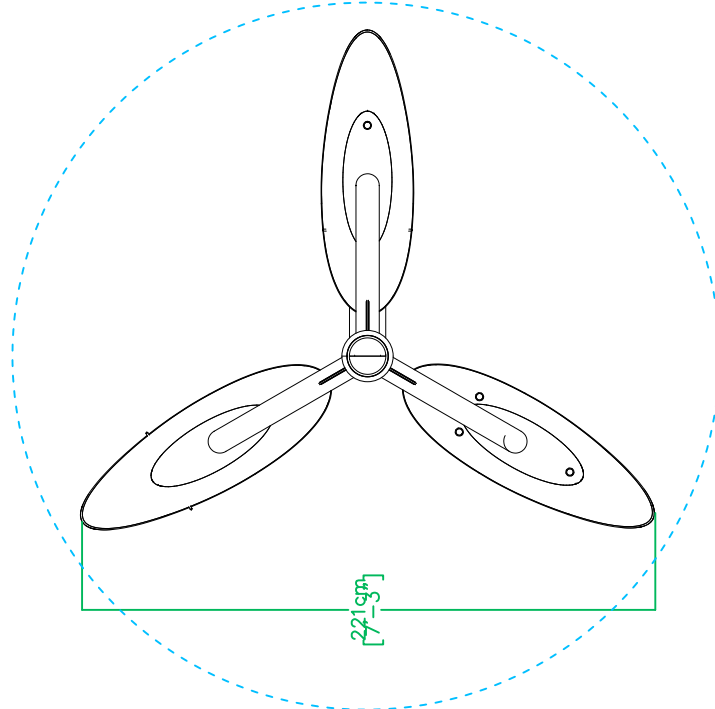
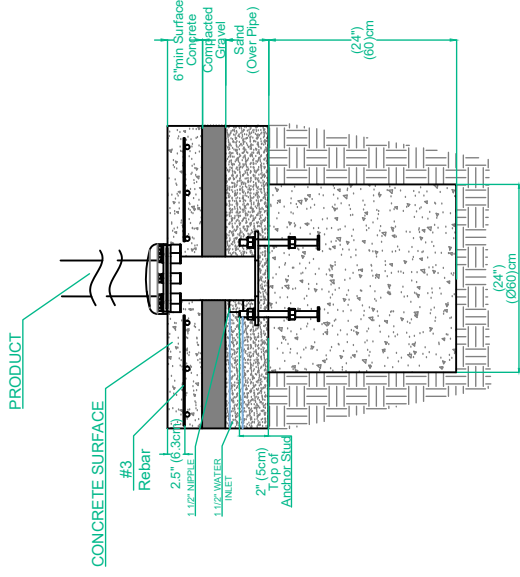
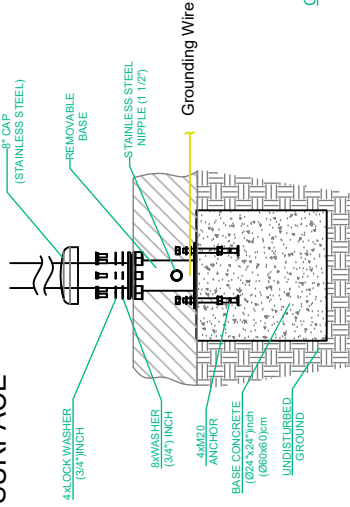
Interactive


Flow Rate	8-12 gpm - 30-45 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel and glass reinforced polyester material with polycarbonate	Coating / Graphic Design
Pressure	7-10psi - 0.7 bar		UV and chemical resistant, oven cured, polyester powder coating. UV and chemical resistant, commercial grade epoxy coated spray paint.
Height	53" - 135 cm		Pipe Diameter
Length			ø2" - ø60 mm
Width	50" - 127 cm		Add-in Options
Spray Zone	ø 118" - ø 300 cm		  Activator Removable
		Play Zones	
		Toddler Family Dynamic	

MATERIAL	Post : Stainless Steel 304/304L
COATING	OD : 5" Sch. 10 Tube Oven Cured, Powder Paint
PRE - COATING	Sand Blasting
NOZZLE	Brass

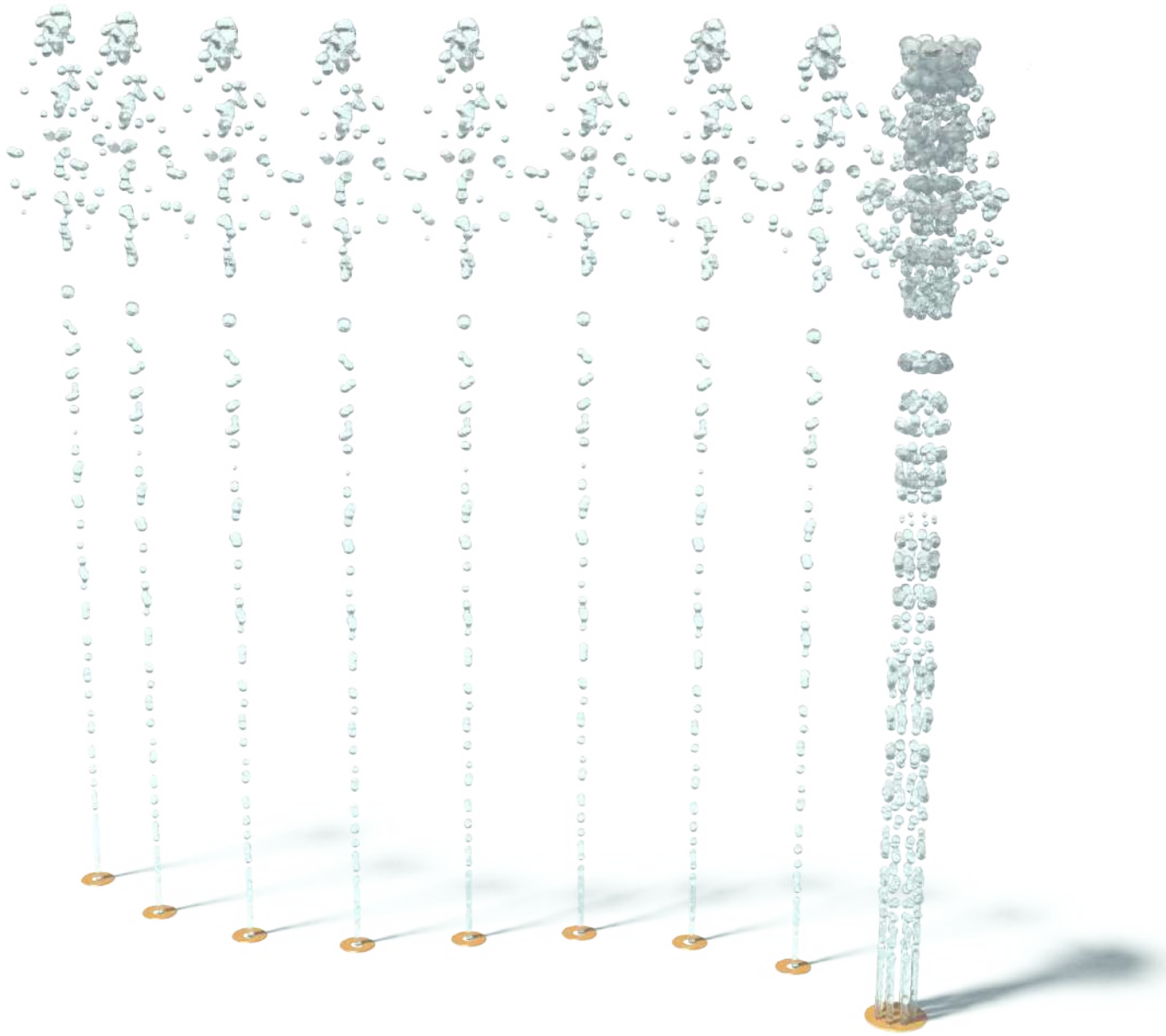


SPLASHPAD SURFACE



PROJECT NAME		DRAWN BY/ DATE	
AQUA ACCENTS II		E. YAVUZ	
		PROJECT NR.	REV
			0.1
		UNIT	
		CM/INCH	
		SHEET	
		WATER SPLASH INC. THIS DRAWING IS A PROPERTY OF WATER SPLASH INC. AND IS NOT TO BE REPRODUCED BY ANY MEANS OR USED TO FURNISH INFORMATION TO OTHERS WITHOUT THE EXPLICIT CONSENT OF WATER SPLASH	

INTERACTIVE SPLASH S-05.12



Flow Rate 24-32 gpm - 91-121 lpm

Pressure 14-18 psi -1 bar

Height -

Width -

Spray Zone ø83" - ø211 cm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L Stainless steel construction with brass nozzles

Play Zones

Toddler **Family** **Dynamic**

Coating / Graphic Design

-

Add-in Options



Led lighting

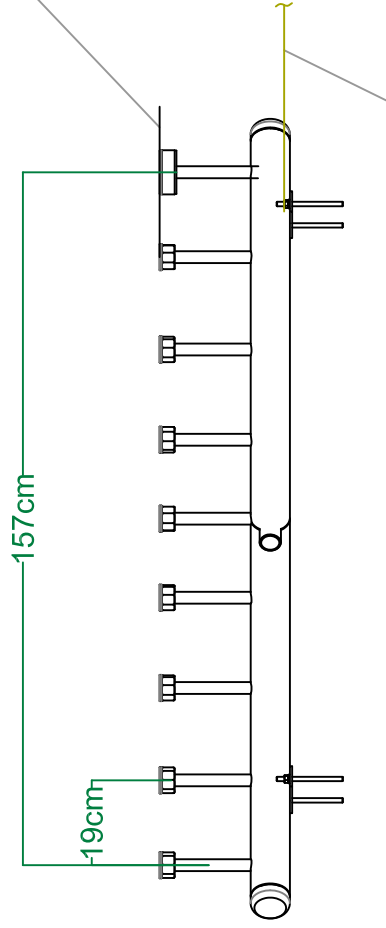
MATERIAL

Post:Stainless Steel 304/304L

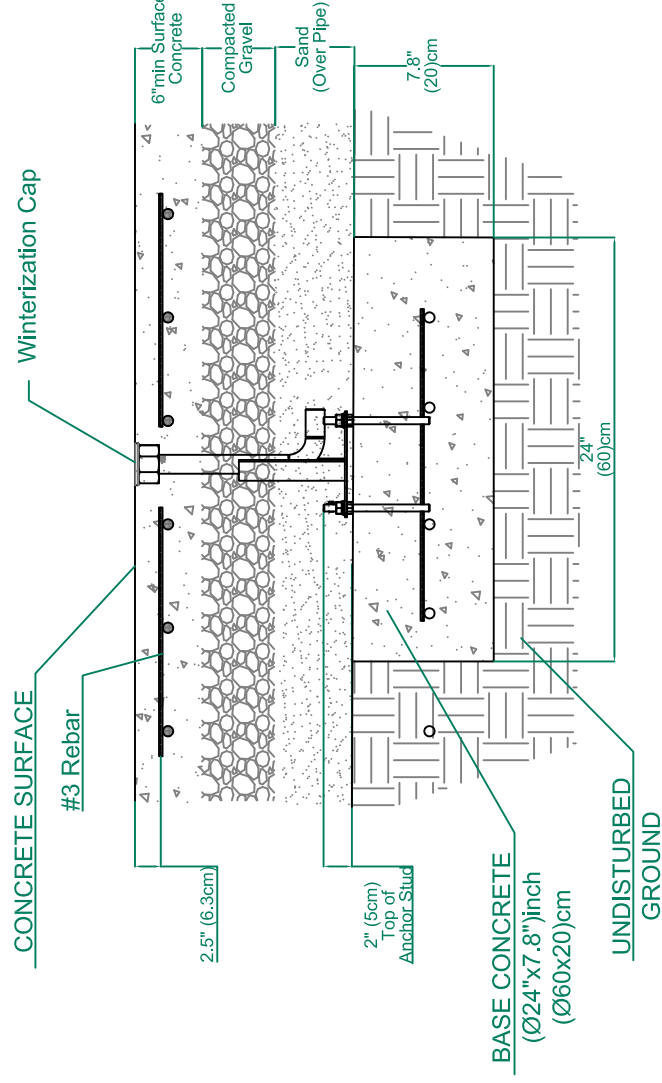
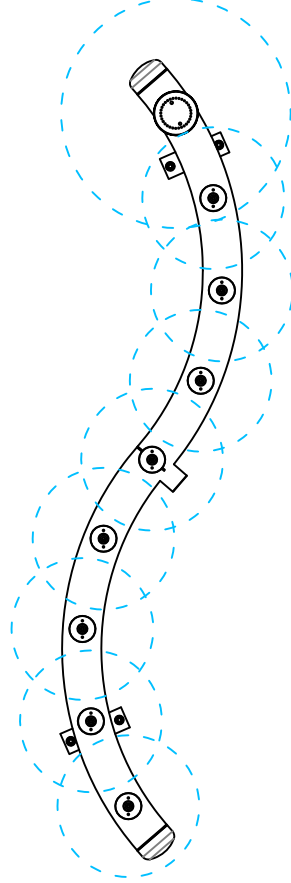
NOZZLE

Brass C360

SPLASHPAD SURFACE



Grounding Wire



PROJECT NAME

INTERACTIVE SPLASH

DRAWN BY/ DATE

M.KOCA

PROJECT NR.

REV

0.1

UNIT

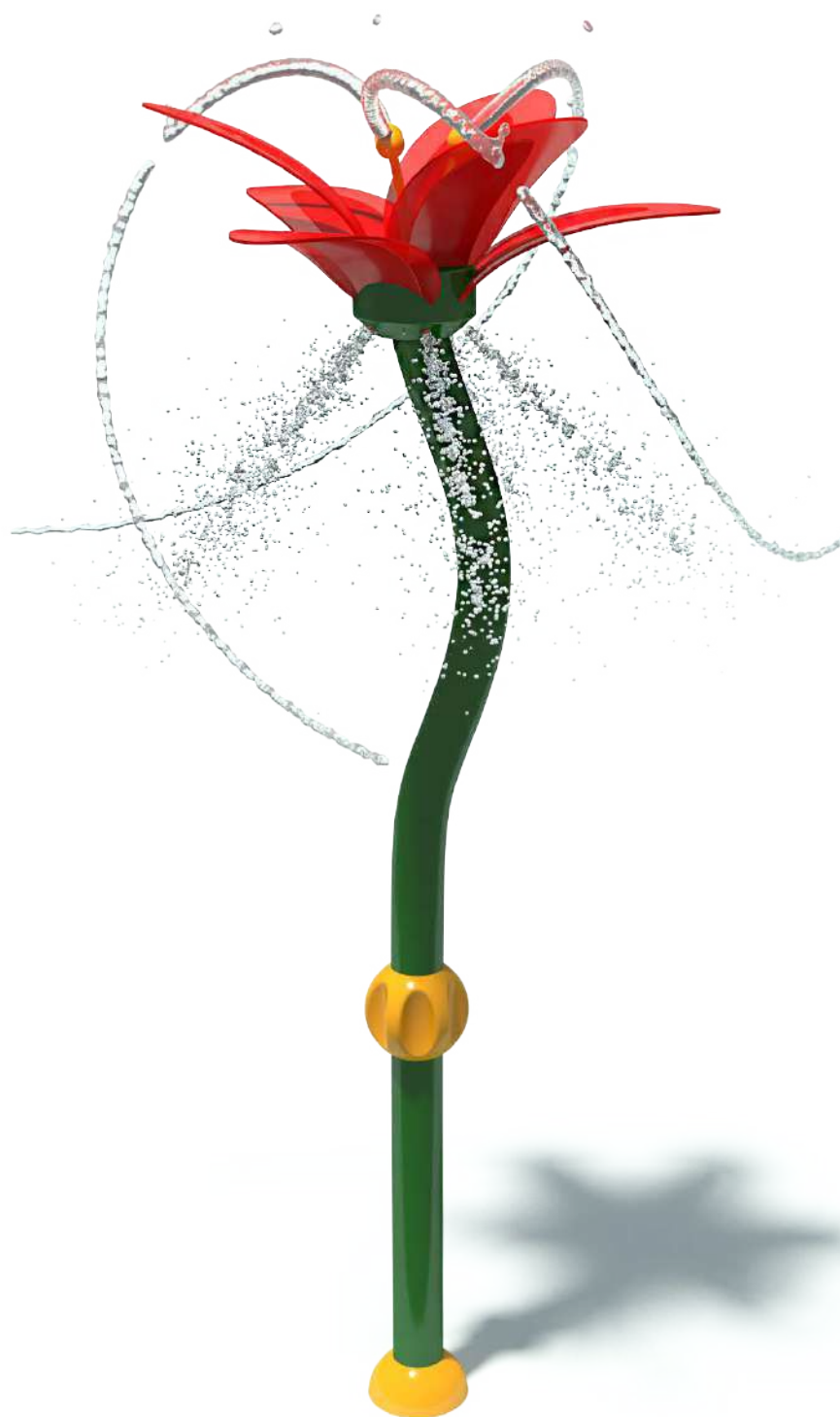
CM

SHEET





WATER SPLASH INC.

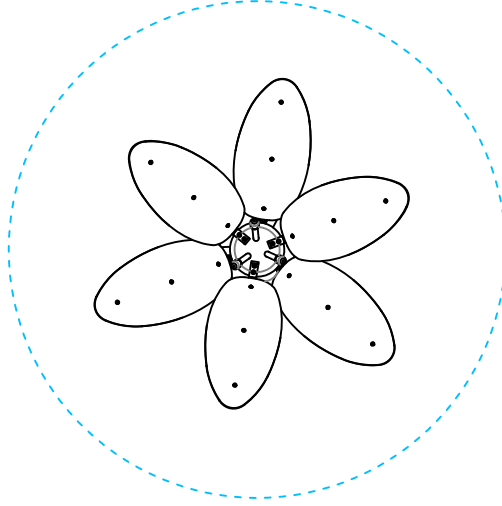
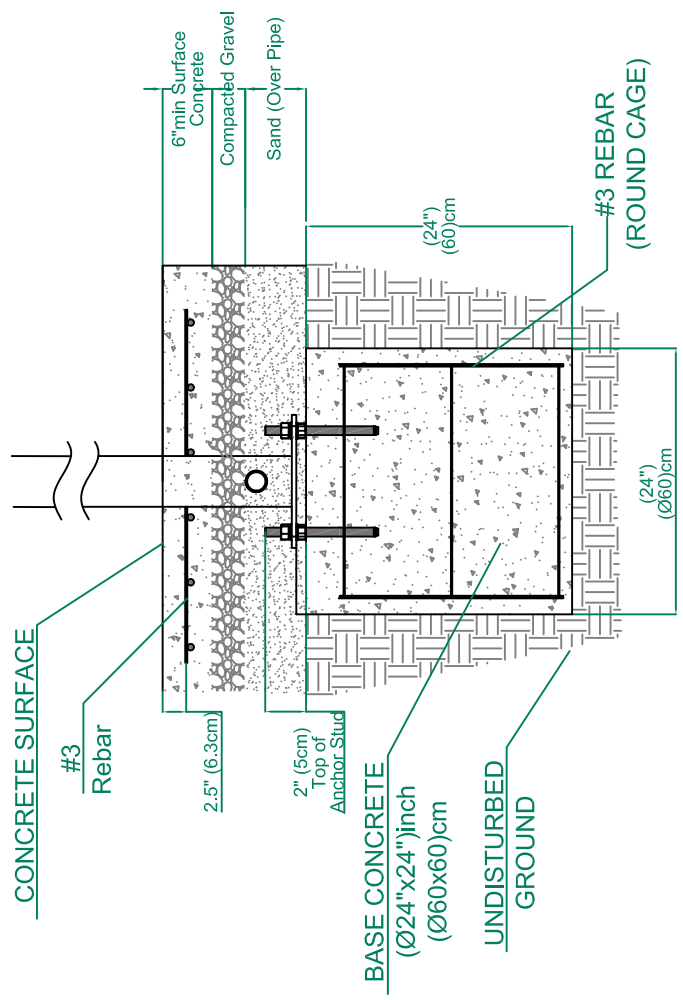
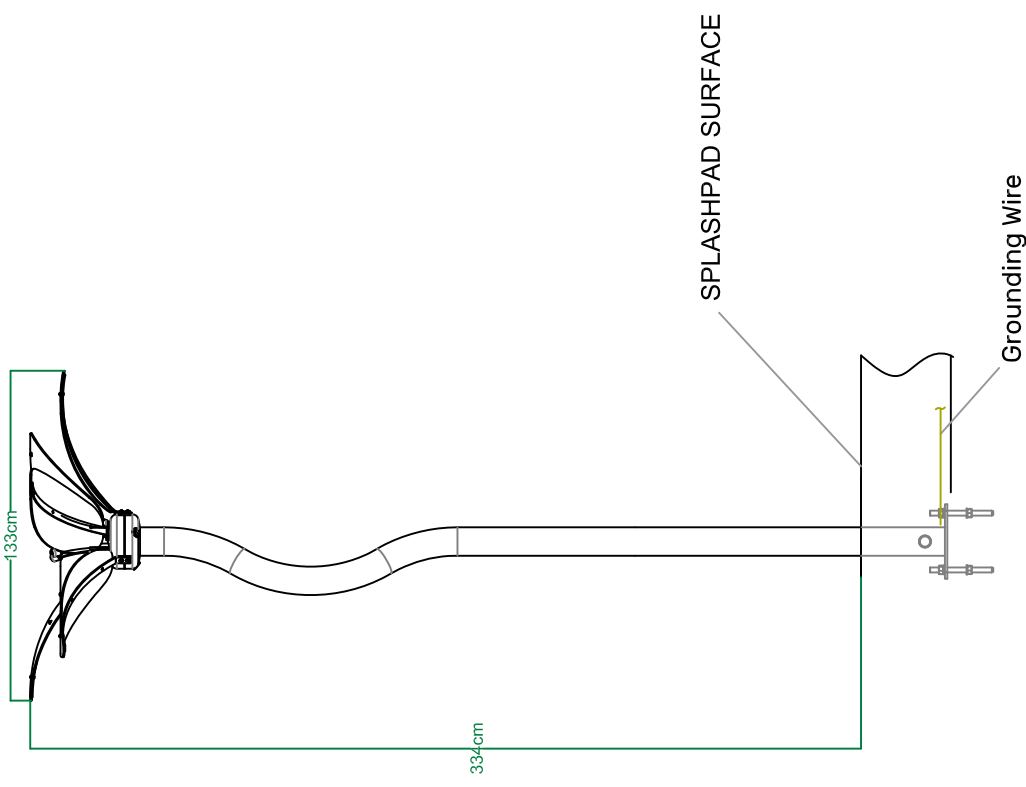
THIS DRAWING IS A PROPERTY OF WATER SPLASH INC. AND IS NOT TO BE REPRODUCED BY ANY MEANS OR USED TO FURNISH INFORMATION TO OTHERS WITHOUT THE EXPLICIT CONSENT OF WATER SPLASH



360 rotation

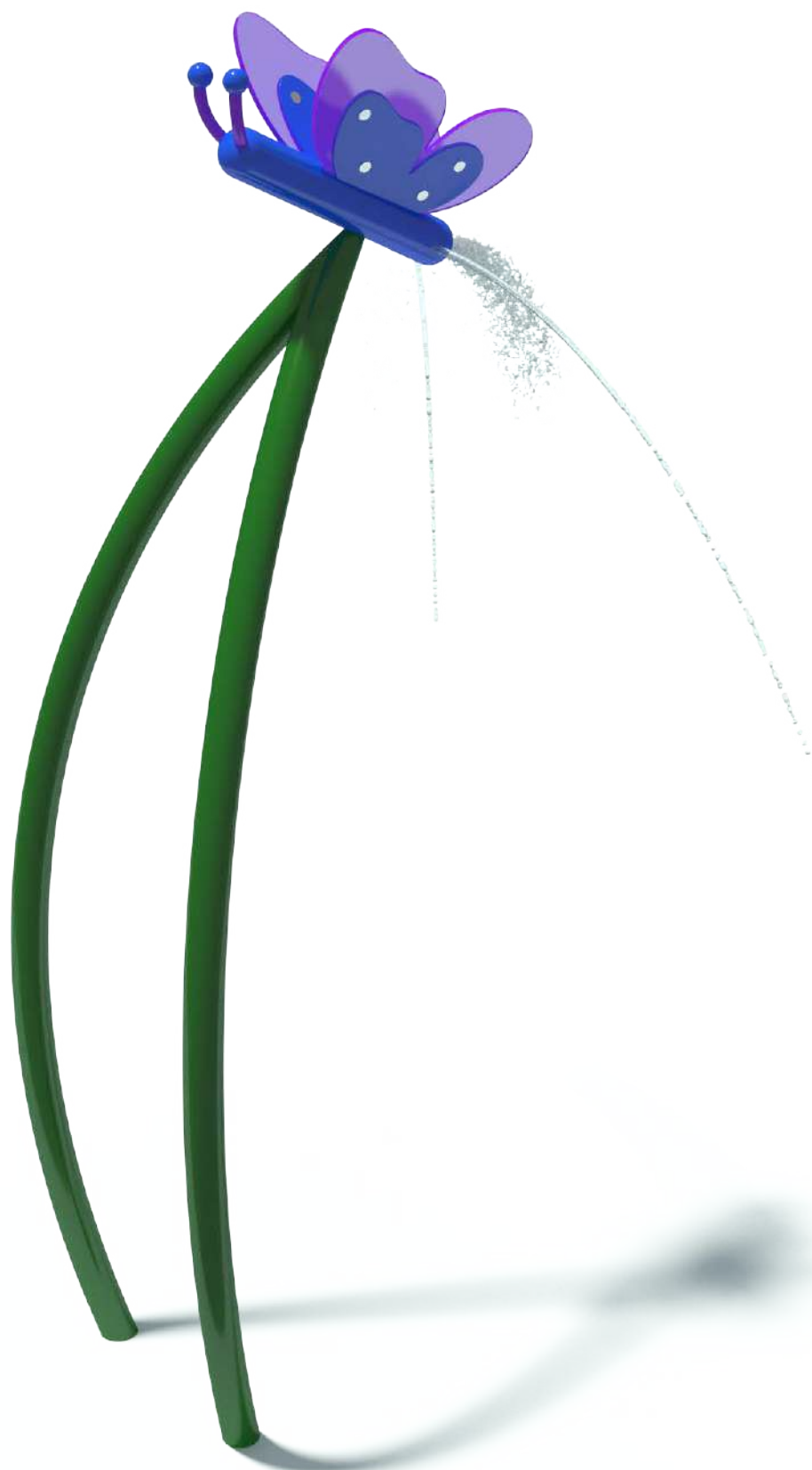
Flow Rate	15-25 gpm - 56-95 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with polycarbonate and brass nozzles	Coating / Graphic Design	
Pressure	5-10 psi - 0.5-0.7 bar		UV and chemical resistant, oven cured, polyester powder coating	
Height	118.9" - 302 cm		Pipe Diameter	ø4" - ø115mm
Length	-		Add-in Options	
Width	40" - 112 cm			
Spray Zone	ø 98.4" - ø 250 cm		Activator	Removable
		Play Zones		
		Toddler Family Dynamic		

MATERIAL	Post-Stainless Steel 304/304L
	Translucent Engineered Plastic
	OD: 4.5" Sch 10 Tube
COATING	Oven Cured, powder paint
PRE-COATING	Sand Blasting
NOZZLE	Brass C360



PROJECT NAME	DRAWN BY/ DATE		
FLORET	M.SINAV		
	PROJECT NR.	REV	UNIT
		0.1	CM
WATER SPLASH INC.			
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SHEET			

BUTTERFLY TO GRASS S-01.59.03



Flow Rate 7-11 gpm - 26-41 lpm

Pressure 8-15 psi - 0.6 bar

Height 141.7" - 360 cm

Length -

Width 35" - 89 cm

Spray Zone ø198" - ø325 cm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel with brass nozzles

Play Zones

Toddler Family Dynamic

Coating / Graphic Design

UV and chemical resistant, oven cured, polyester powder coating

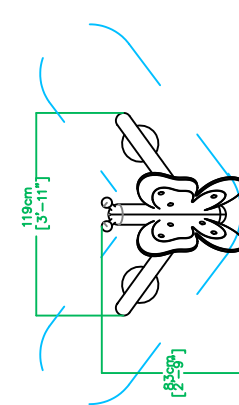
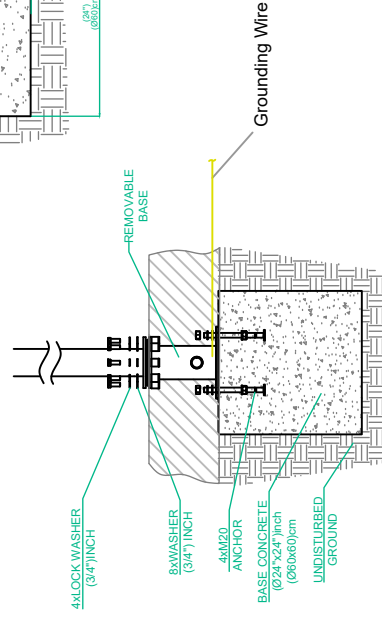
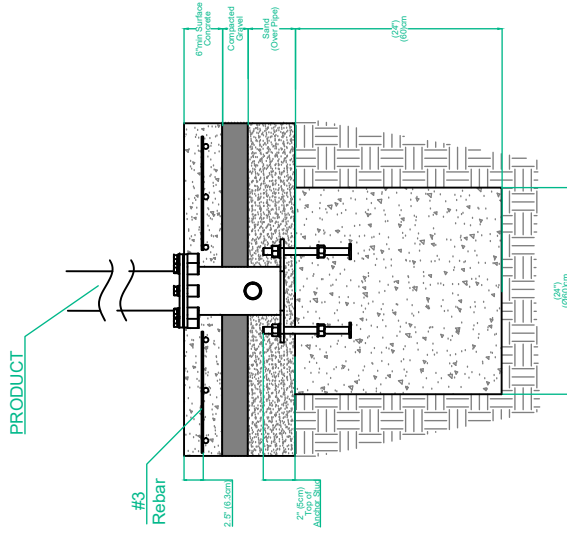
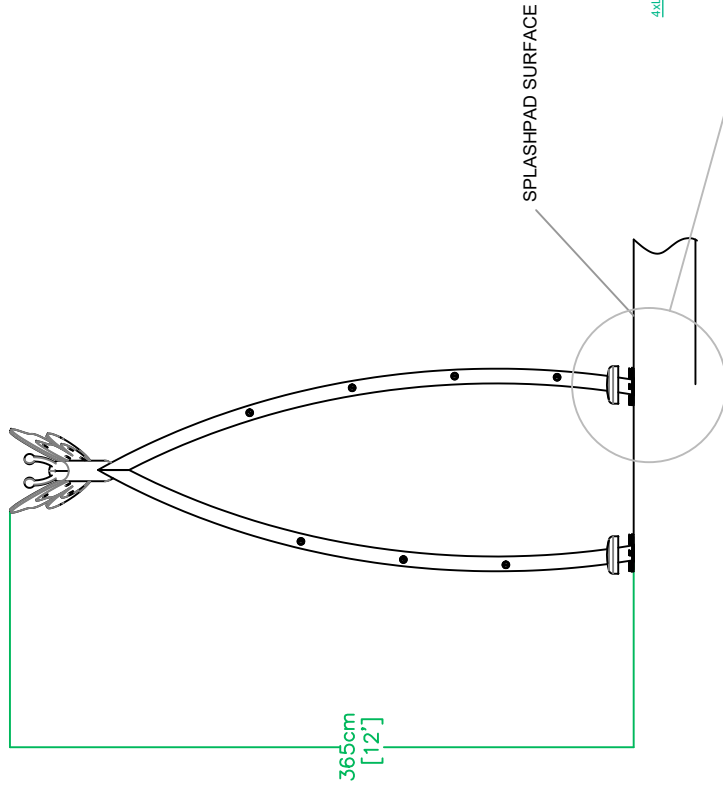
Pipe Diameter ø3" - ø90 mm

Add-in Options



Removable

MATERIAL	Post:Stainless Steel 304/304L
COATING	Oven Cured, powder paint
PRE-COATING	Sand Blasting
NOZZLE	Brass C360



PROJECT NAME	DRAWN BY/ DATE	
	E.YAVUZ	
	PROJECT NR.	REV
		0.1
	UNIT	
	CM/INCH	
	SHEET	



BUTTERFLY TO GRASS

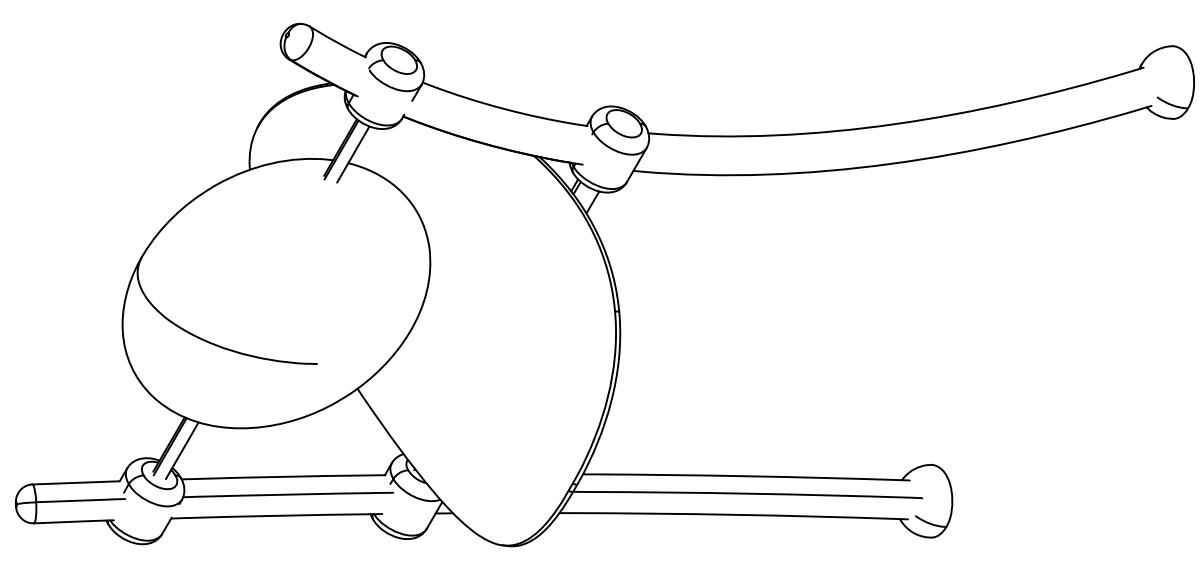
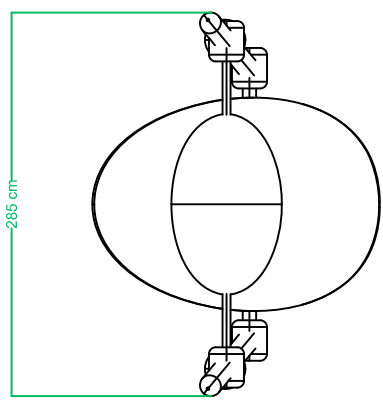
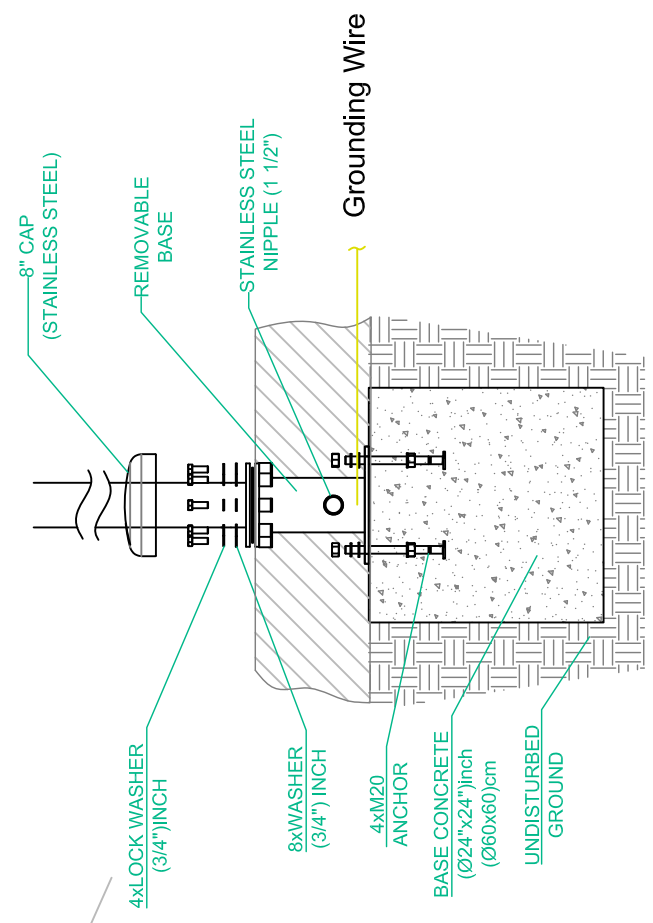
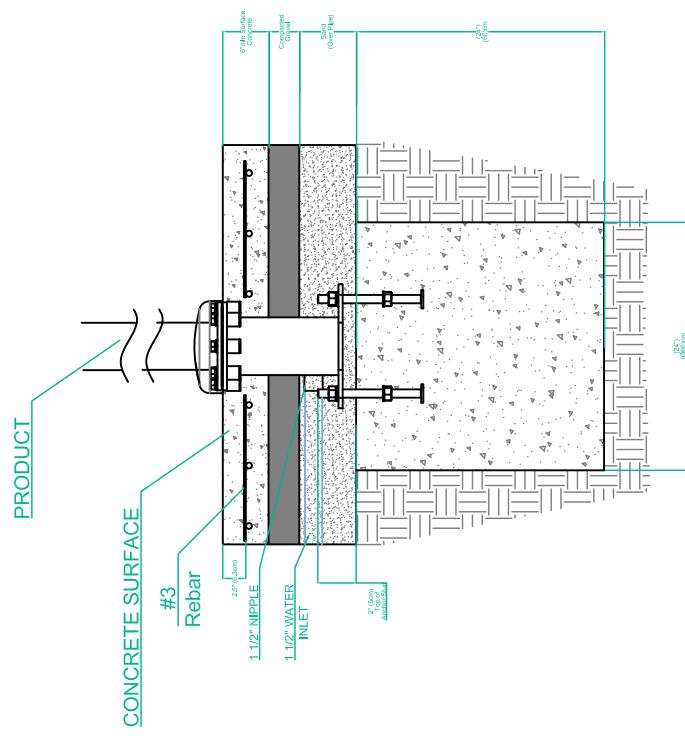
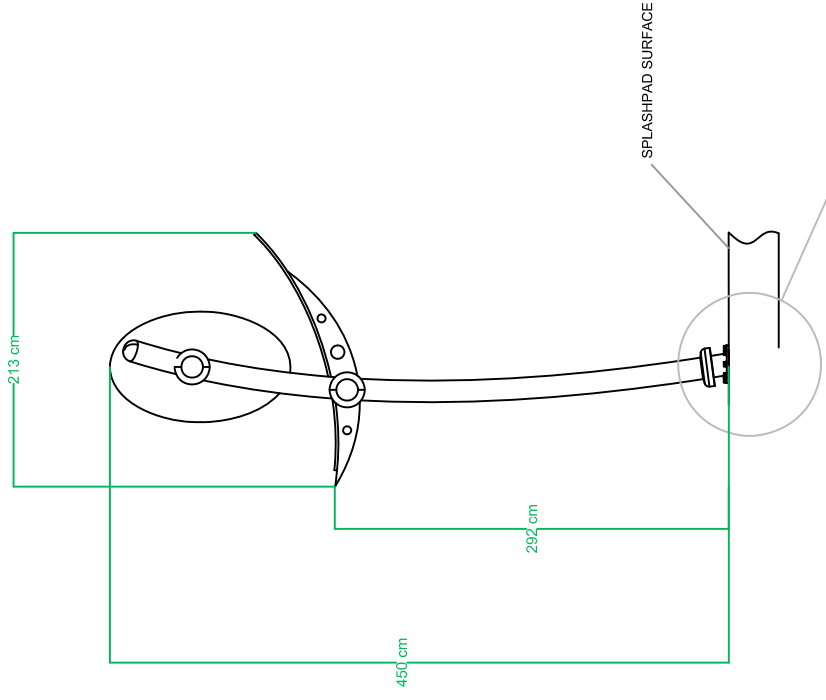
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High action

Flow Rate	50-70 gpm - 189-265 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel material with glass reinforced polyester bucket and polycarbonate platform	Coating / Graphic Design	
Pressure	8-12 psi - 0.5-0.8 bar		UV and chemical resistant, oven cured, polyester powder coating. UV and chemical resistant, commercial grade epoxy coated spray paint.	
Height	177" - 450 cm		Pipe Diameter	ø4" - ø115 mm
Length	112.2" - 285 cm		Add-in Options	
Width	83.8" - 213 cm			
Spray Zone	ø189" - ø480 cm		Activator	Removable
		Play Zones		
		Toddler	Family	Dynamic



PROJECT NAME	DRAWN BY/ DATE	
	i. UYGAR	
GRAND SPLASH III SINGLE	PRODUCT NO	REV
		0.1
 WATER SPLASH INC.		UNIT
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		SHEET

GRASSHOPPER SPLASH S-01.46



Flow Rate 20-25 gpm - 80-95 lpm

Pressure 8-15 psi - 0.5-1 bar

Height 120" - 304 cm

Length -

Width 48" - 122 cm

Spray Zone ø50" - ø127 cm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzles

Play Zones

Toddler Family Dynamic

Coating / Graphic Design

UV and chemical resistant, oven cured, polyester powder coating

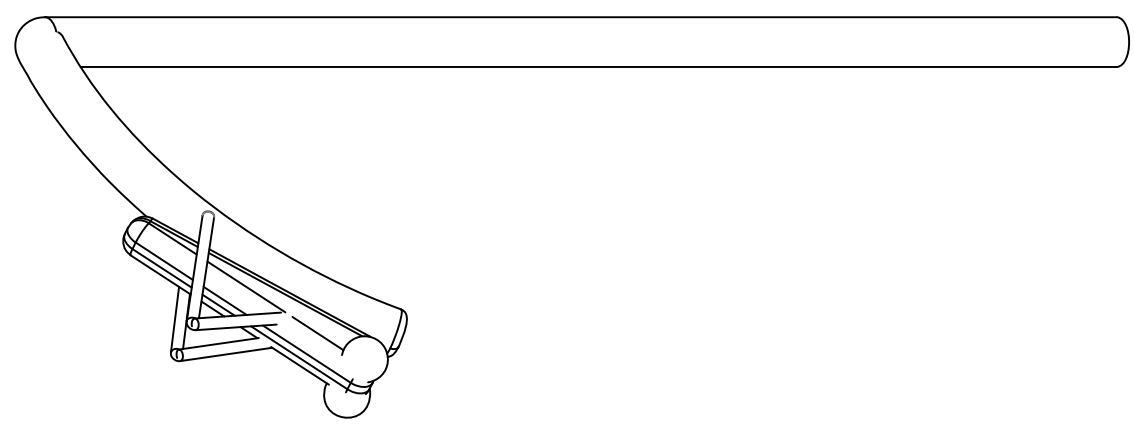
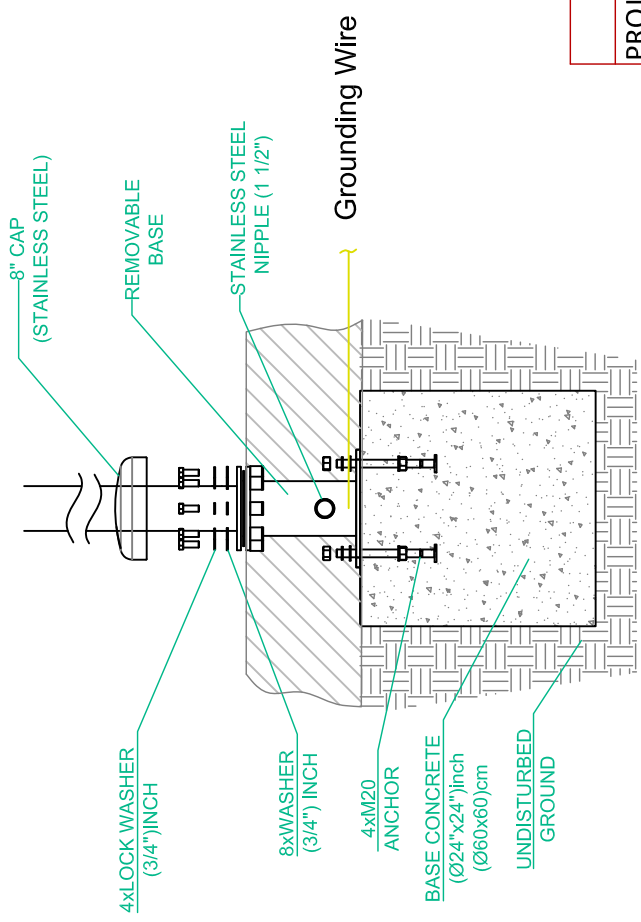
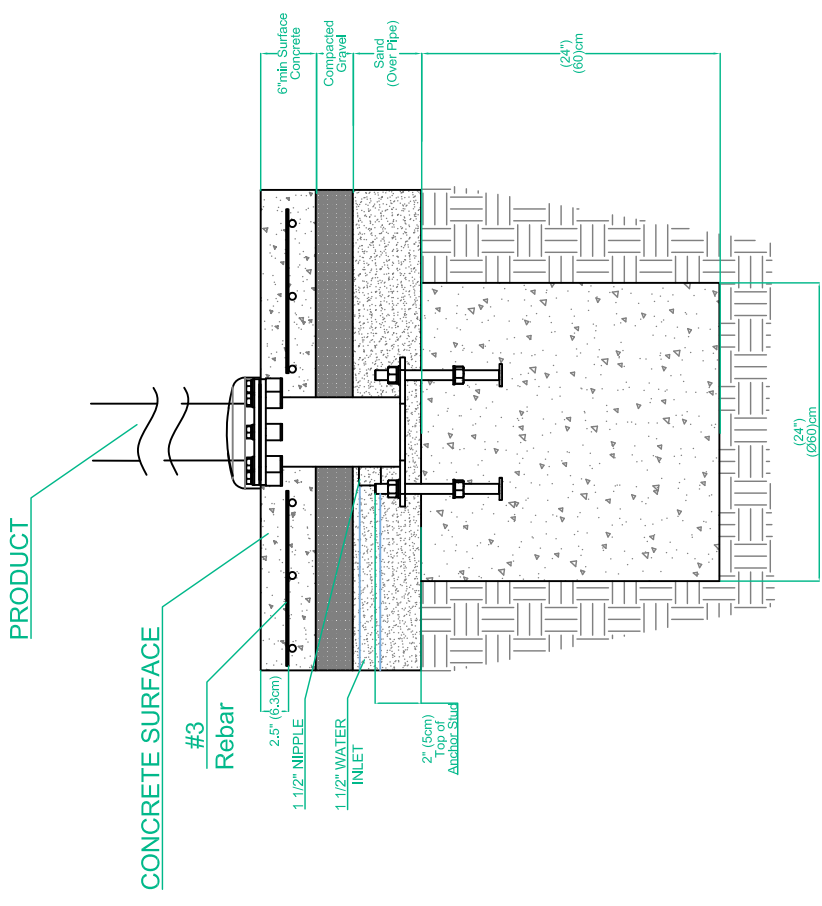
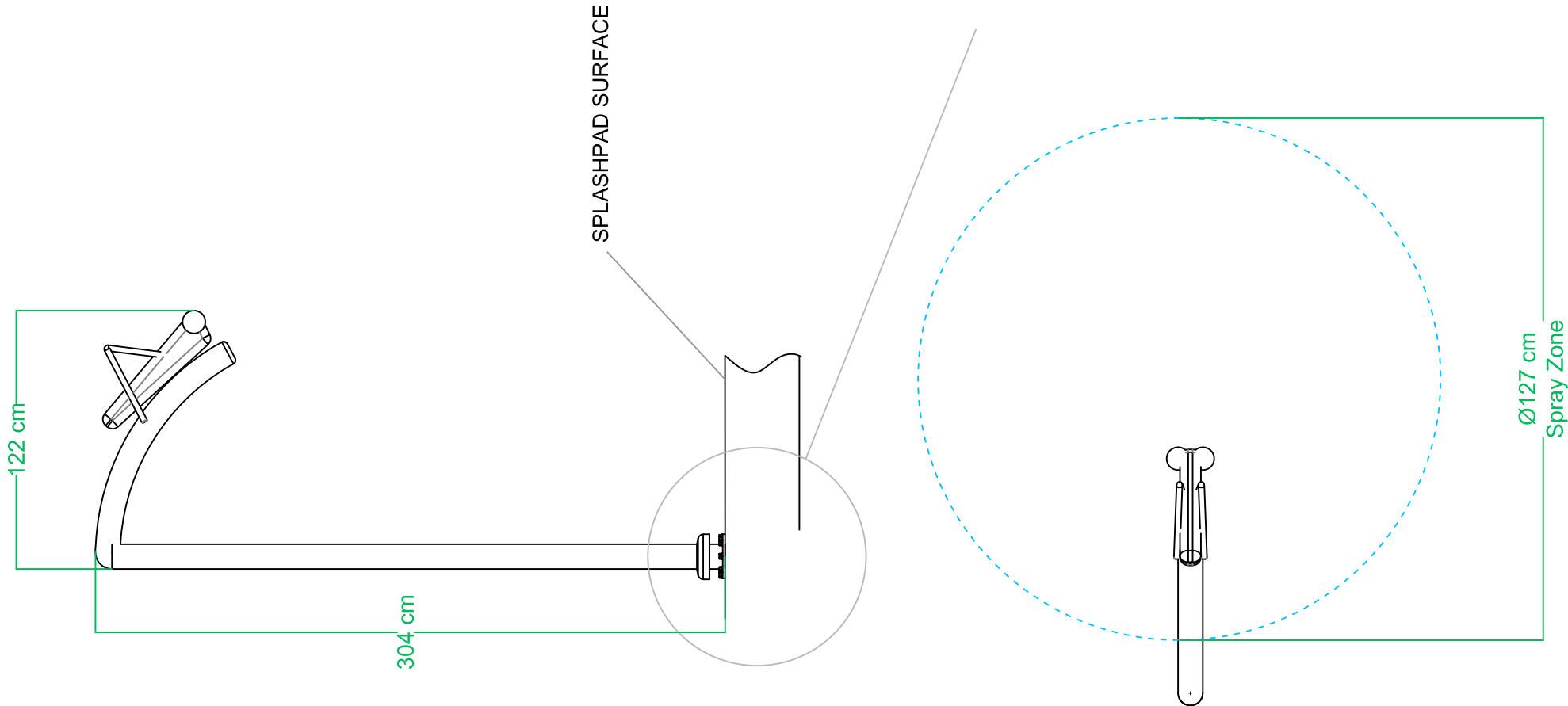
Pipe Diameter ø3" - ø90 mm

Add-in Options



Removable

MATERIAL	Post : Stainless Steel 304/304L
	Top : Translucent Engineering Plastic
	OD : 3" Sch 10 Tube
COATING	Oven Cured, Powder Paint
PRE - COATING	Sand Blasting
NOZZLE	Brass




PROJECT NAME	GRASSHOPPER SPLASH	
DRAWN BY/ DATE	i. UYGAR	
PRODUCT NO	S-01.46	REV 0.1
UNIT	CM	SHEET



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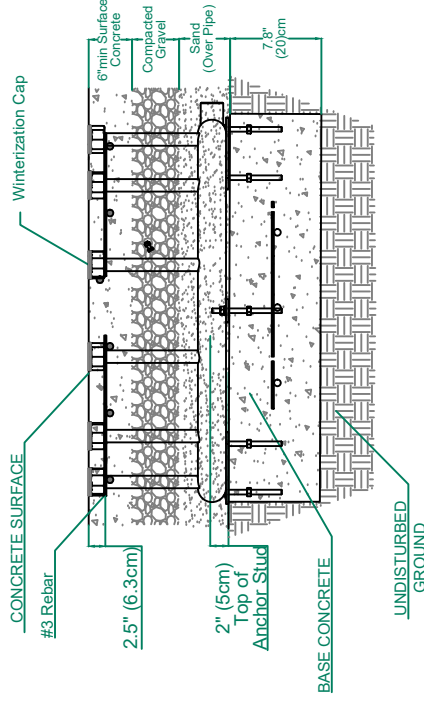
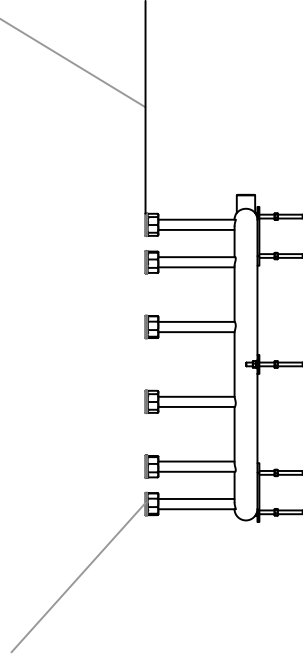


Flow Rate	7-9 gpm - 27-35 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzle	Coating / Graphic Design	
Pressure	4-8 psi - 0.4-0.5 bar		-	
Height	-		Add-in Options	
Width	-	Play Zones	 Led Lighting	 Removable
Spray Zone	ø110" - ø280cm	Toddler Family Dynamic		

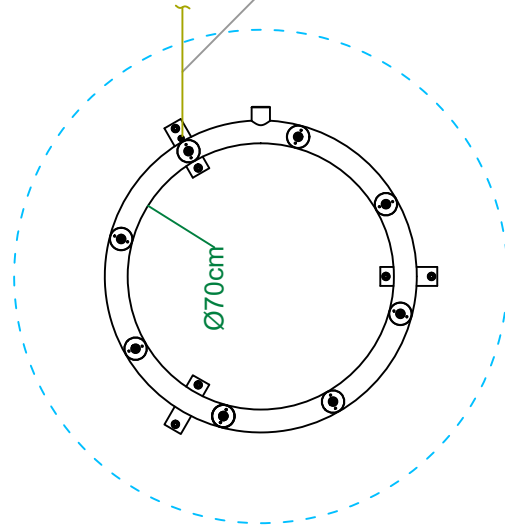
MATERIAL	Post:Stainless Steel 304/304L
NOZZLE	Brass C360

SPLASHPAD SURFACE

REMOVABLE BRASS JET NOZZLE



Grounding Wire



PROJECT NAME	MINI CIRCULAR SHOWER
DRAWN BY/ DATE	E.YAVUZ
PROJECT NR.	REV
	0.1
UNIT	CM/INCH
SHEET	





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FOUNTAIN SPRAY III S-05.25.01



Flow Rate	10 gpm - 37 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L Stainless steel construction with brass nozzle	Coating / Graphic Design	
Pressure	15 psi - 1 bar		-	
Height	-		Add-in Options	
Width	-	Play Zones		
Spray Zone	ø60" - ø152 cm	Toddler Family Dynamic	Led lighting	Removable

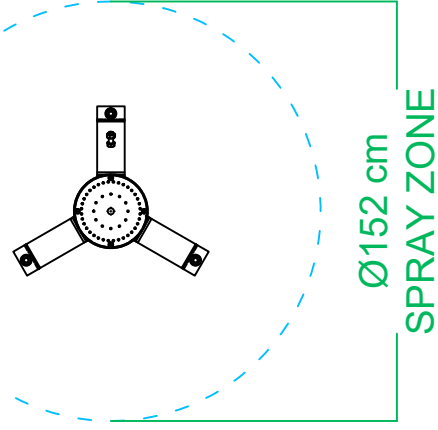
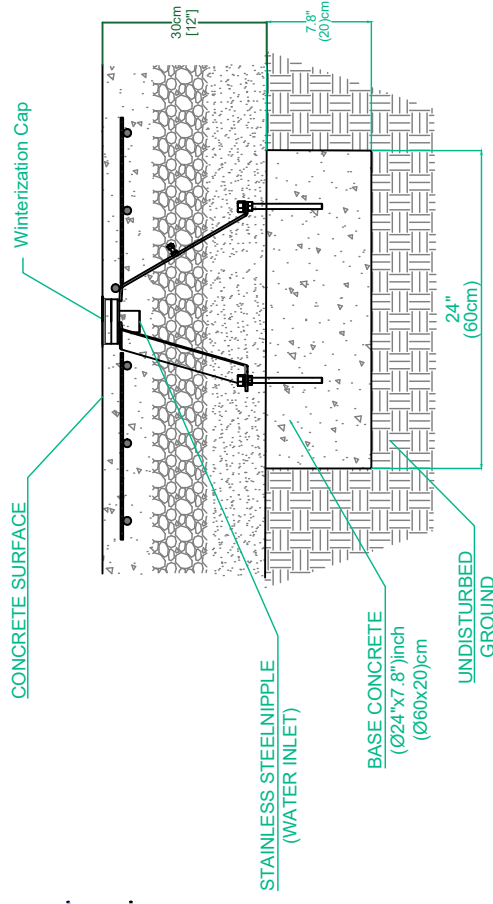
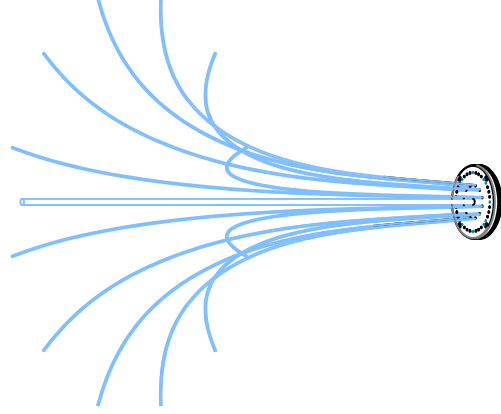
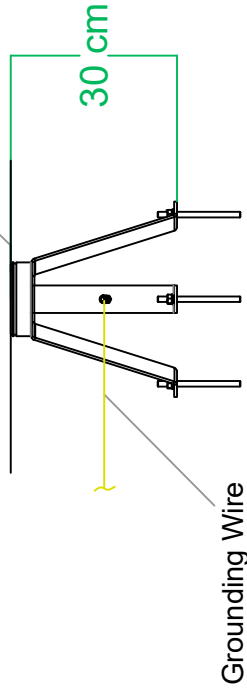
MATERIAL

Post:Stainless Steel 304/304L

NOZZLE

Brass C360

SPLASHPAD SURFACE

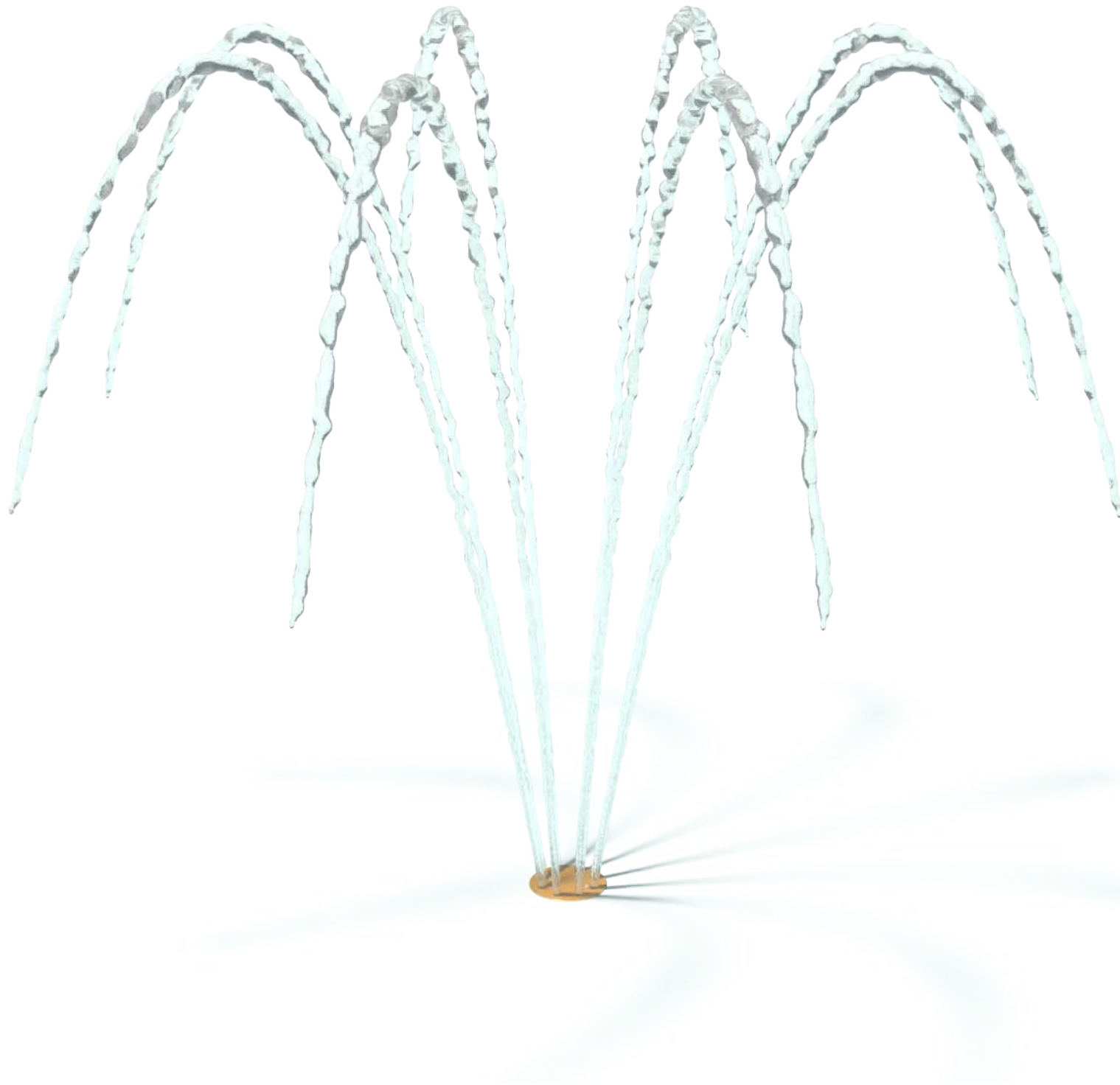


PRODUCT NAME		DRAWN BY/ DATE	
FOUNTAIN SPRAY III		I. UYGAR	
PRODUCT NO	REV	PRODUCT NO	REV
S-05.25.01	0.1	S-05.25.01	0.1
UNIT		UNIT	
CM/INCH		CM/INCH	
SHEET		SHEET	



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Flow Rate 5-7 gpm - 19-26 lpm

Pressure 4-6 psi - 0.3-0.4 bar

Height -

Width -

Spray Zone ø60" - ø152 cm

Material Detail

Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with brass nozzle

Play Zones

Toddler **Family** **Dynamic**

Coating / Graphic Design

-

Add-in Options

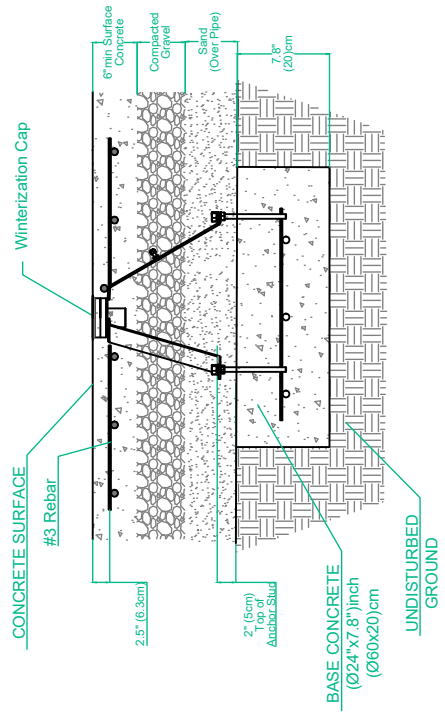
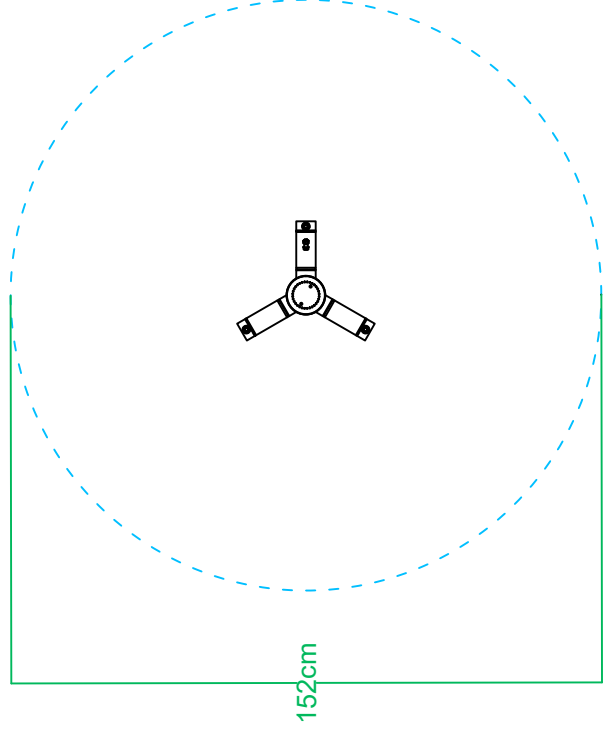
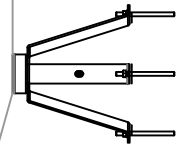


Led lighting Removable

MATERIAL	Post:Stainless Steel 304/304L
NOZZLE	Brass C360

REMOVABLE BRASS
NOZZLE

SPLASHPAD SURFACE



PROJECT NAME	DRAWN BY/ DATE	
	M.SINAV	
AQUA GEYSER	REV	0.1
	PROJECT NR.	
UNIT		CM
SHEET		



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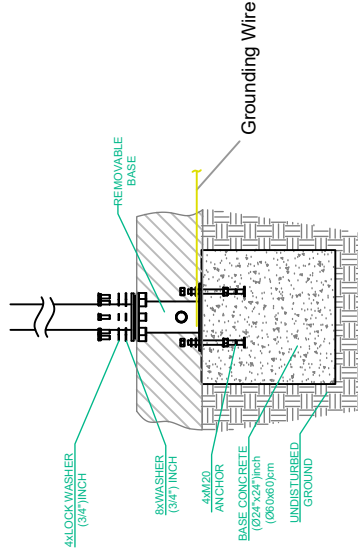
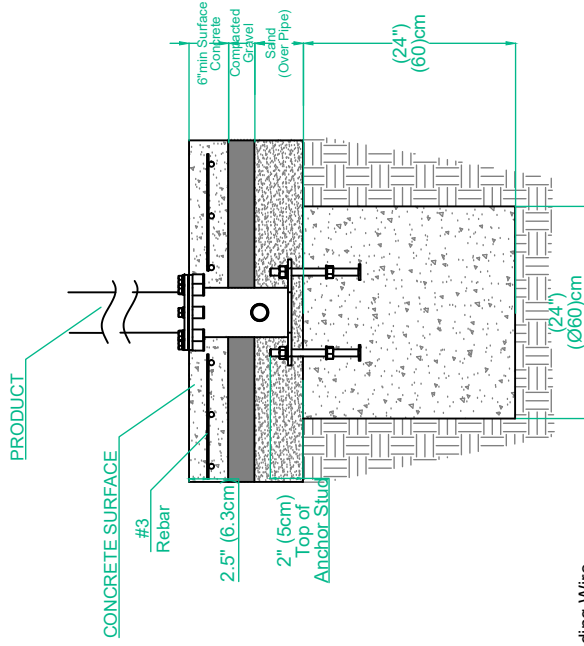
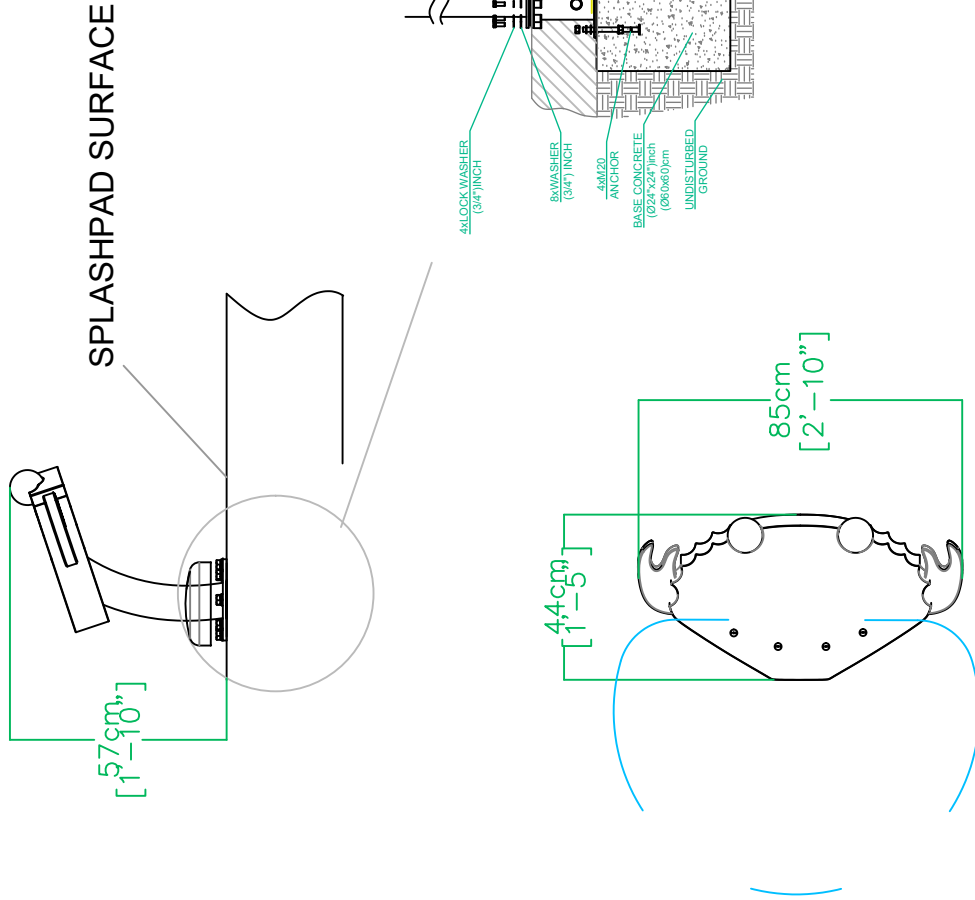
HASTY CRAB S-02.08.05



360 rotation

Flow Rate	6-12 gpm - 22-44 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel and glass reinforced polyester material	Coating / Graphic Design UV and chemical resistant, oven cured, polyester powder coating. UV and chemical resistant, commercial grade epoxy coated spray paint.
Pressure	8-12 psi - 0.5-0.8 bar		
Height	22.4" - 57 cm		
Length	-		
Width	ø 33.8" - ø 86 cm		
Spray Zone	ø 83" - ø 211 cm		
		Play Zones	Pipe Diameter ø4" - ø115 mm
		Toddler Family Dynamic	Add-in Options
			 Removable

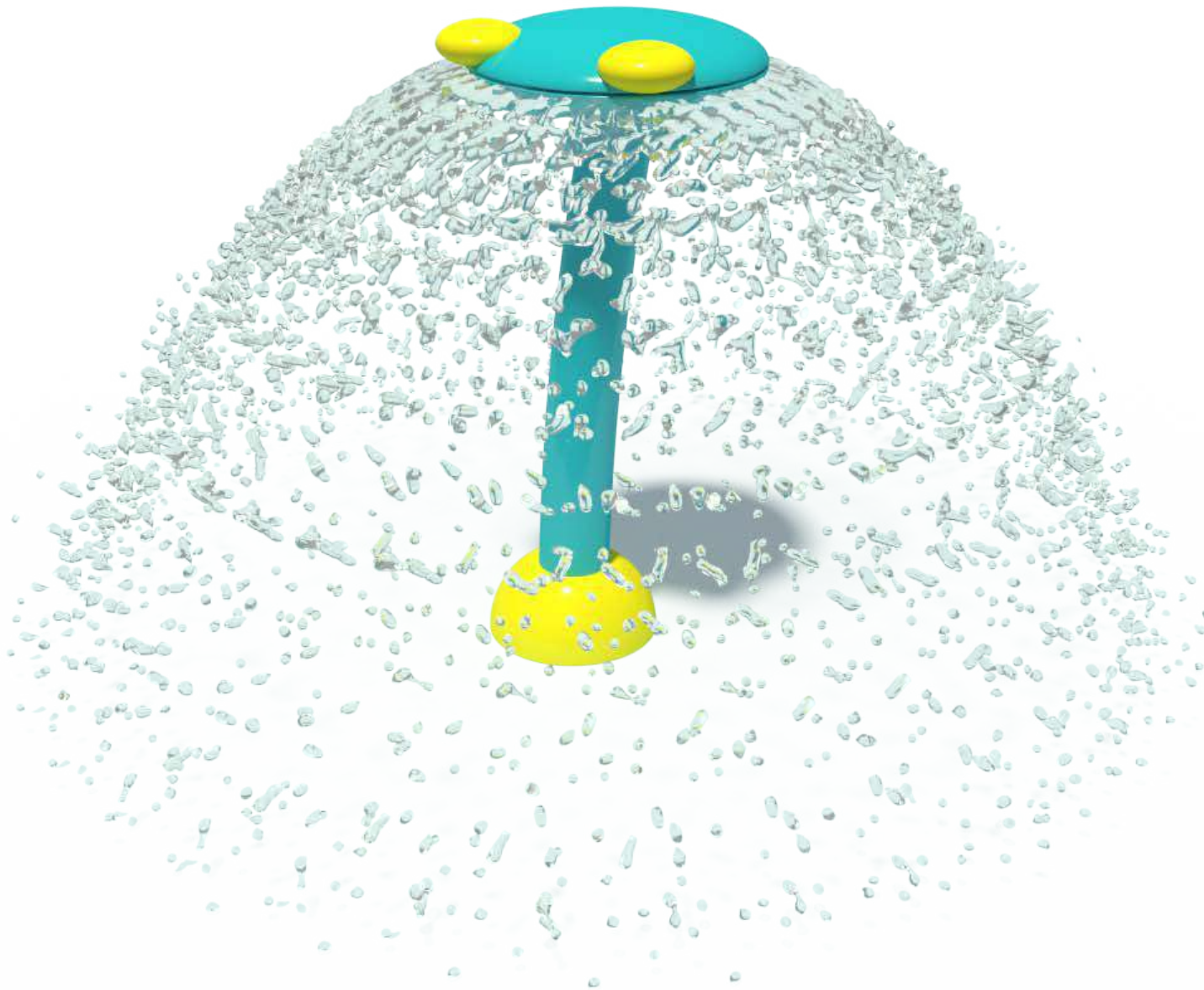
MATERIAL	Post:Stainless Steel 304/304L
COATING	OD: 4.5" Sch 10 Tube
PRE-COATING	Oven Cured, powder paint
NOZZLE	Sand Blasting Brass C360




PROJECT NAME	HASTY CRAB	DRAWN BY/ DATE	E.YAVUZ
		REV	0.1
		PROJECT NR.	
		UNIT	CM/INCH
		SHEET	

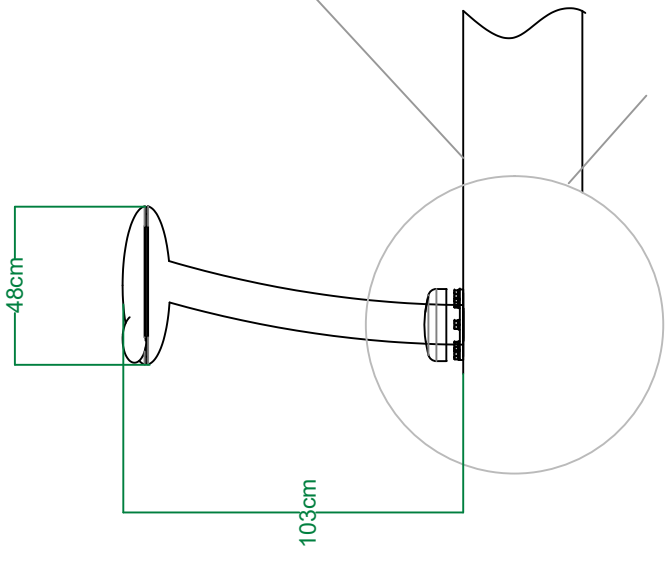


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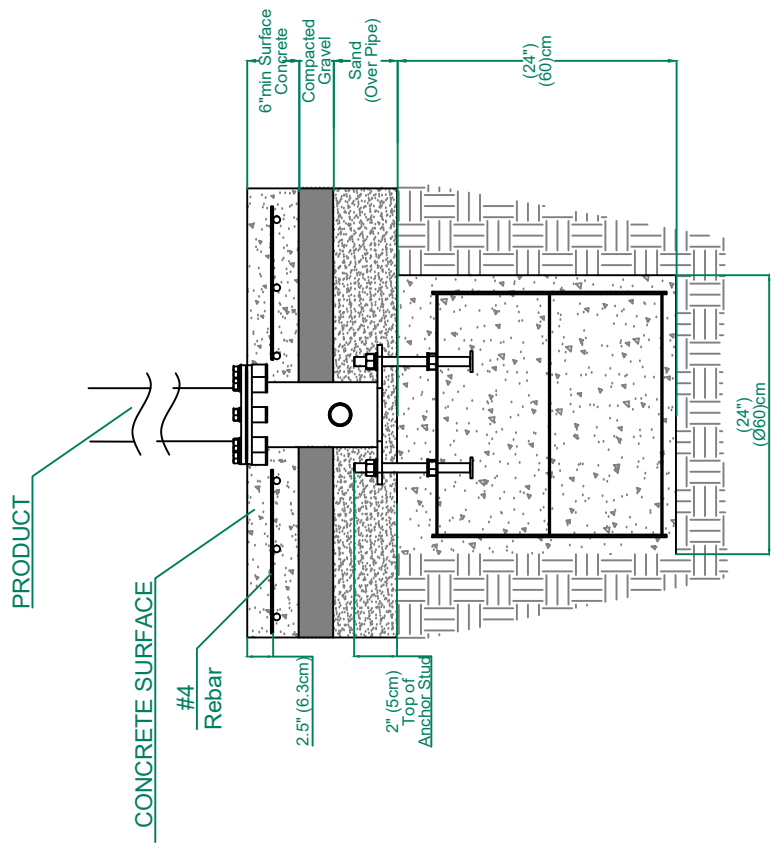


Flow Rate	20-30 gpm - 90-110 lpm	Material Detail	Coating / Graphic Design		
Pressure	8-15 psi - 0.5-1 bar			Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel material	UV and chemical resistant, oven cured, polyester powder coating
Height	40.5" - 103 cm				
Length	-	Play Zones	Pipe Diameter	ø4" - ø115 mm	
Width	18.9" - 48 cm		Toddler	Family	Dynamic
Spray Zone	ø 60" - ø 152 cm	Add-in Options			
 <p>Removable</p>					

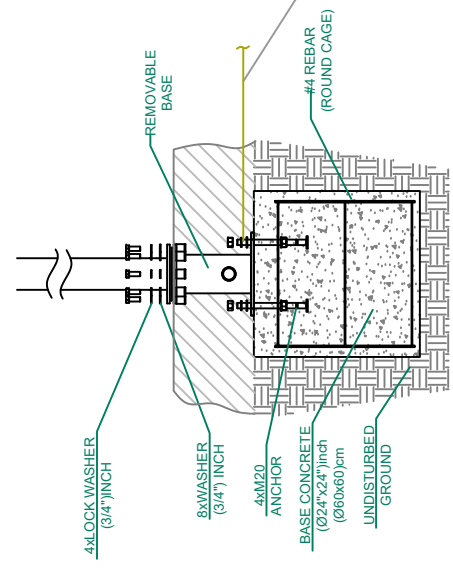
MATERIAL	Post-Stainless Steel 304/304L
COATING	OD: 4.5" Sch 10 Tube
PRE-COATING	Oven Cured, powder paint
NOZZLE	Sand Blasting Brass C360



SPLASHPAD SURFACE



Grounding Wire



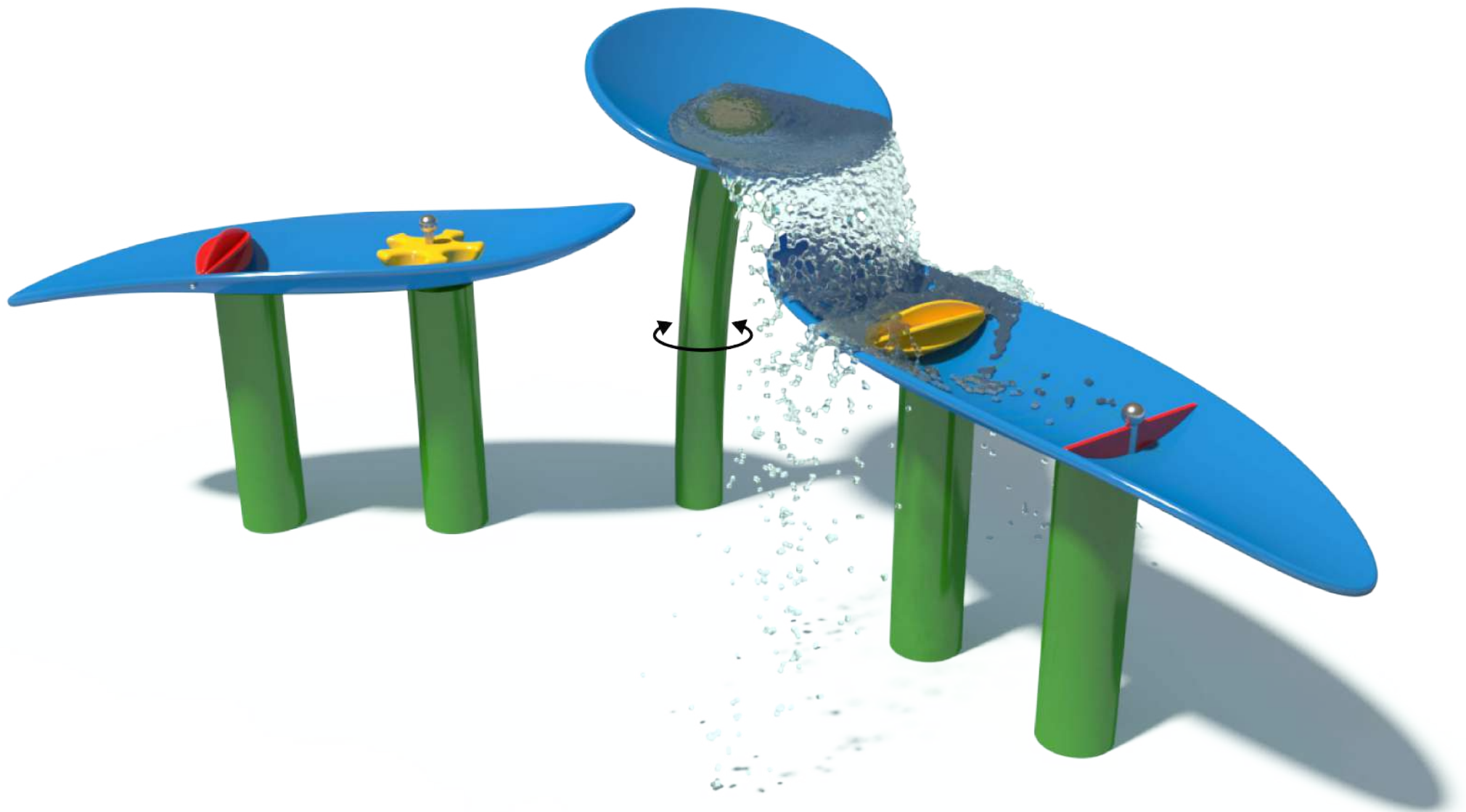
PROJECT NAME	DRAWN BY/ DATE	
	V.RENCBER	
AQUA NATURE FROG	PROJECT NR.	REV
		0.1
	UNIT	SHEET
	CM	



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AQUA ACCENTS VARIANT S-97.10.06



Interactive

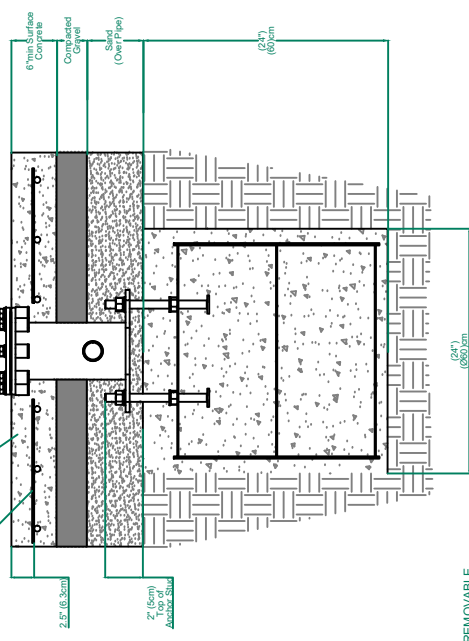
Flow Rate	8-12 gpm - 30-45 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel and glass reinforced polyester material	Coating / Graphic Design UV and chemical resistant, oven cured, polyester powder coating. UV and chemical resistant, commercial grade epoxy coated spray paint.
Pressure	7-10psi - 0.7 bar		
Height	36.6" - 93 cm		
Length			
Width	81.1" - 206 cm		
Spray Zone	ø 118" - ø 300 cm		
		Play Zones	Pipe Diameter
		Toddler Family Dynamic	ø2" - ø60 mm
		Add-in Options	
		Activator Removable	

MATERIAL	Post - Stainless Steel 304/304L
	Top - Translucent Engineering Plastic
	OD : 3" - 4" Sch 10 Tube
COATING	Oven Cured, Powder Paint
PRE - COATING	Sand Blasting
NOZZLE	Brass

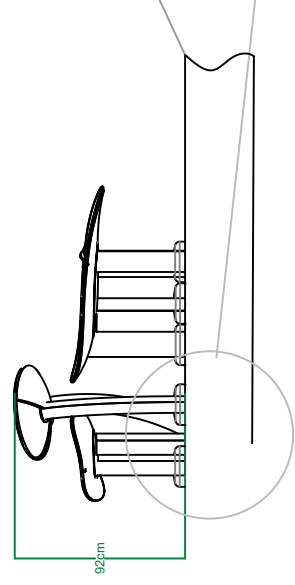
PRODUCT

CONCRETE SURFACE

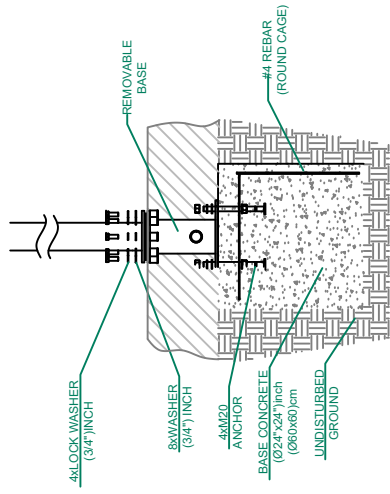
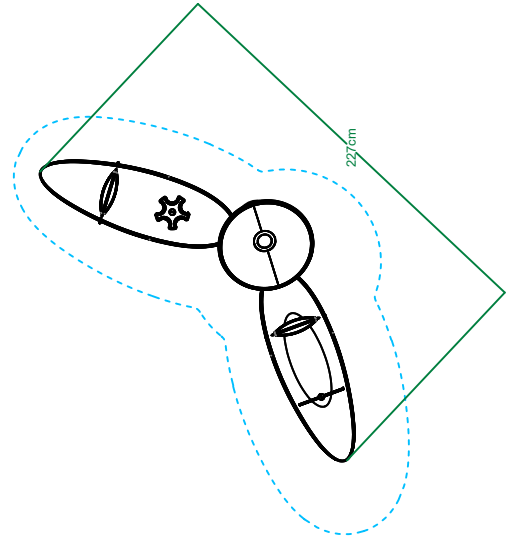
#4 Rebar



SPLASHPAD SURFACE



Grounding Wire



DRAWN BY/ DATE	
V.RENCBER	
PROJECT NR.	0.1
REV	0.1
UNIT	CM
SHEET	

AQUA ACCENTS VARIANT



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AQUA FORMS - FROG II S-02.17.01



Flow Rate	7-11 gpm - 26-41 lpm	Material Detail Commercial grade, non corrosive, UV and chemical resistant, glass reinforced polyester material with brass nozzle	Coating / Graphic Design UV and chemical resistant, commercial grade epoxy coated spray paint. Graphic shall be hand made, artistic paint.
Pressure	8-15 psi - 0.5-1 bar		Pipe Diameter -
Height	1" - 2.54 cm		Add-in Options
Length	-		Led lighting
Width	-		
Spray Zone	ø60" - ø152 cm		Play Zones Toddler Family Dynamic

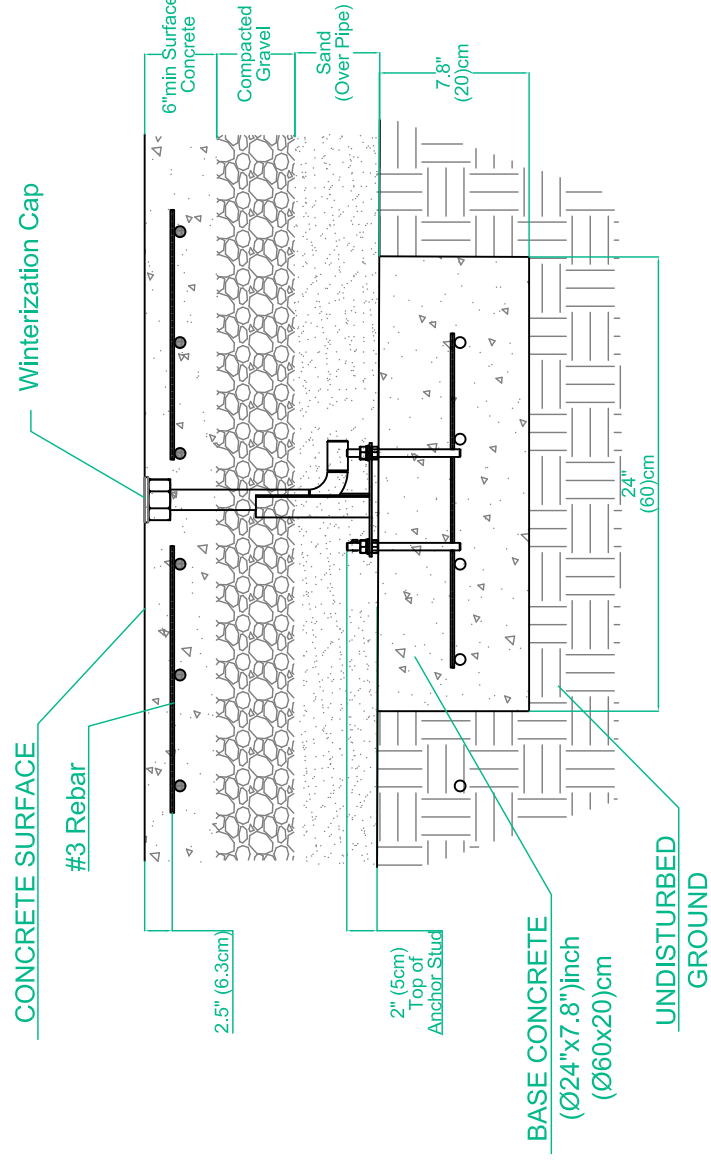
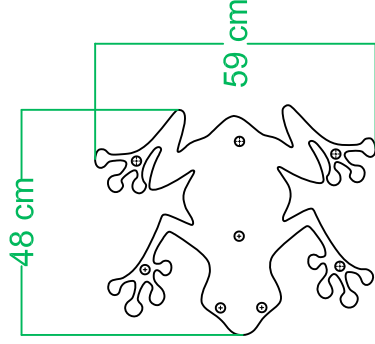
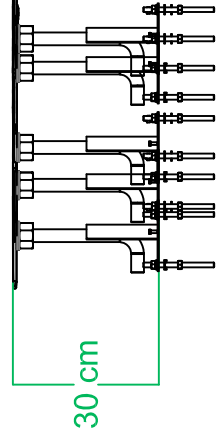
MATERIAL

Post:Stainless Steel 304/304L

NOZZLE

Brass C360

SPLASHPAD SURFACE



PROJECT NAME

DRAWN BY/ DATE

i. UYGAR

PRODUCT NO

S-02.17.01

AQUA FORMS FROG

REV

0.1



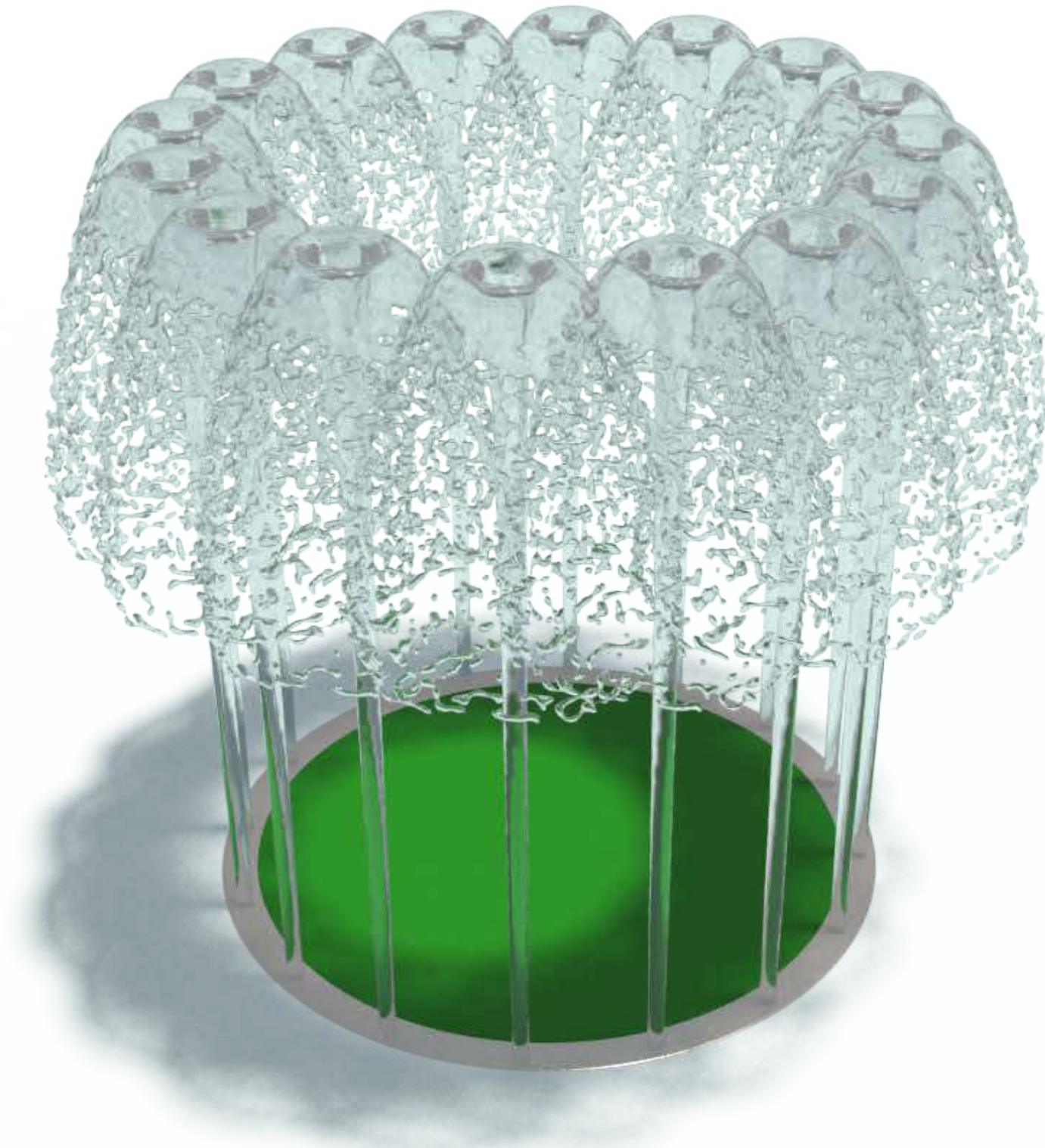
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UNIT
CM/INCH

SHEET

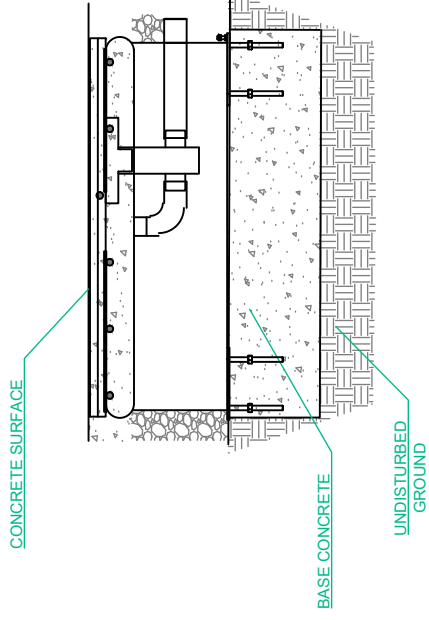
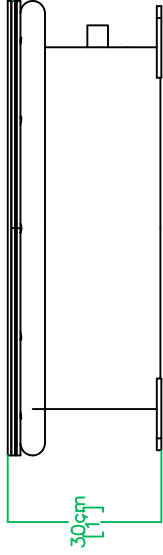
SPIDER WEB SPRAY I S-05.22



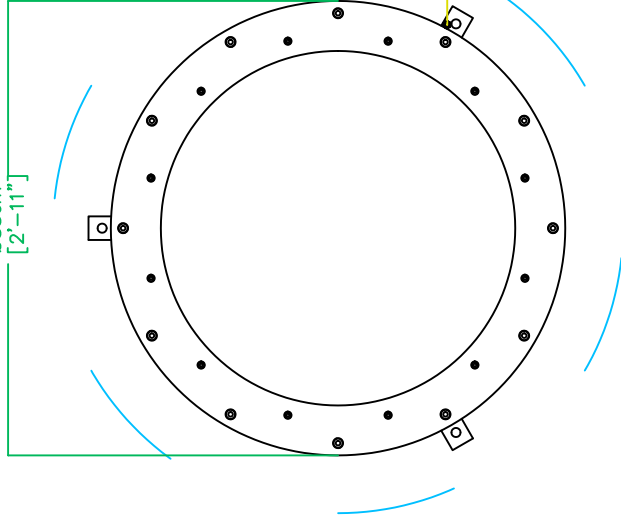
Flow Rate	5 gpm - 22.7 lpm	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality Stainless steel construction with glass reinforced polyester material	Coating / Graphic Design -
Pressure	4-8 psi - 0.3-0.5 bar		
Height	-		
Width	-	Play Zones Toddler Family Dynamic	Add-in Options  Activator  Led lighting
Spray Zone	ø120" - ø305 cm		


MATERIAL	Post:Stainless Steel 304/304L
NOZZLE	Brass C360

STAINLESS SHEET PLATE



Ø88cm
[2'-11"]



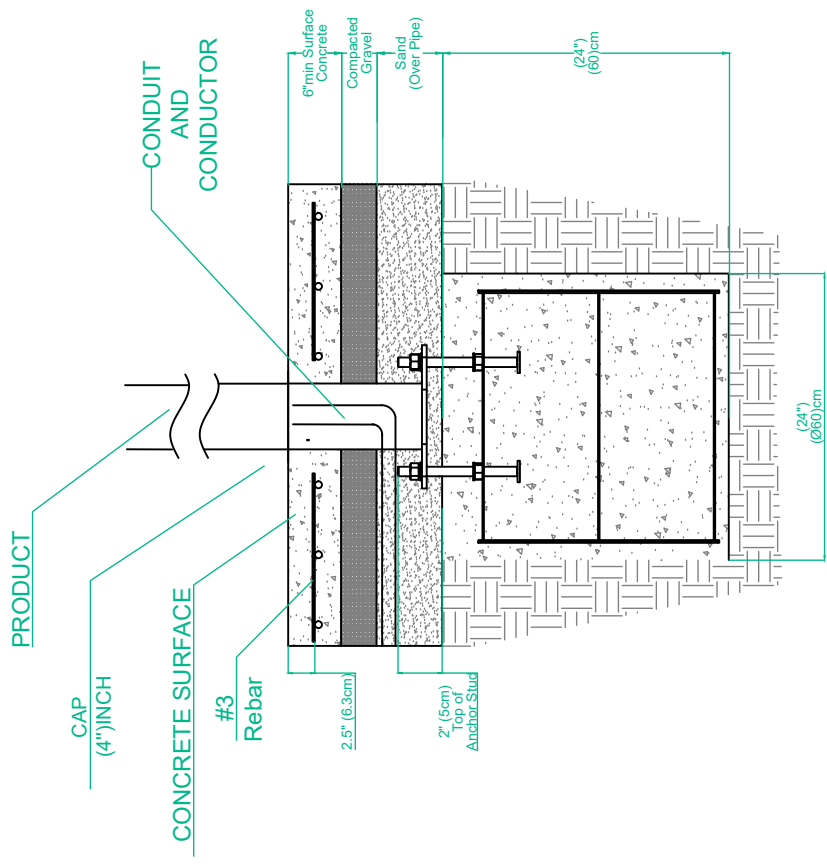
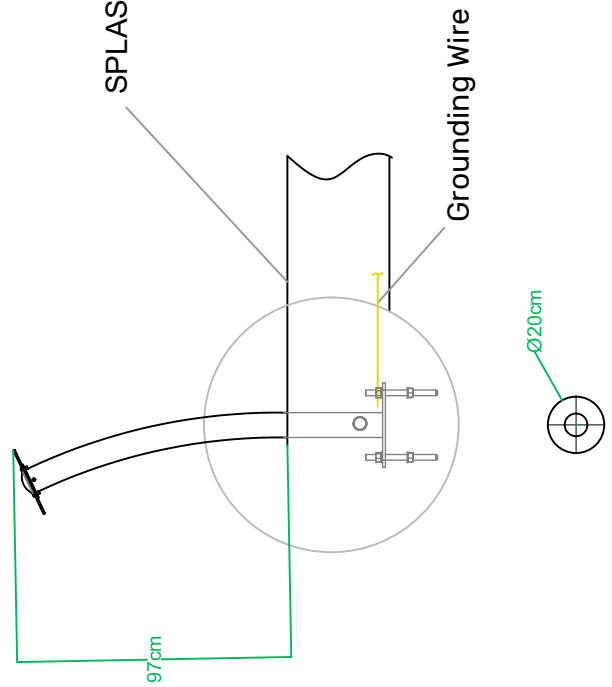
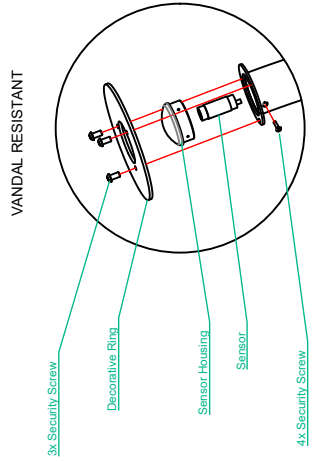
PROJECT NAME	SPIDER WEB SPRAY I	
DRAWN BY/ DATE	E.YAVUZ	
PROJECT NR.	REV	0.1
UNIT		
CM/INCH		
SHEET		
 WATER SPLASH INC. <small>THIS DRAWING IS A PROPERTY OF WATER SPLASH INC. AND IS NOT TO BE REPRODUCED BY ANY MEANS OR USED TO FURNISH INFORMATION TO OTHERS WITHOUT THE EXPLICIT CONSENT OF WATER SPLASH</small>		

GARDEN ACTIVATOR S-97.07



Flow Rate	-	Material Detail Commercial, non corrosive, chemical resistant 304/304L quality stainless steel material with polycarbonate top	Coating / Graphic Design	
Pressure	-		Weather resistant, UV and chemical protective powder coated paint	
Height	40" - 101 cm		Pipe Diameter	ø3" - ø90mm
Length	-		Add-in Options	
Width	-		 Removable	
Spray Zone	-		Play Zones	
		Toddler	Family	Dynamic

MATERIAL	Post-Stainless Steel 304/304L
	Decorative Ring: Translucent Engineered Plastic
	OD: 4.5" Sch 10 Tube
COATING	Oven Cured, powder paint
PRE-COATING	Sand Blasting
SENSOR HOUSING	Nylon



PROJECT NAME	GARDEN ACTIVATOR	DRAWN BY / DATE	E.YAVUZ
		PROJECT NR.	REV
			0.1
		UNIT	CM
		SHEET	



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1

2

3

4

A

B

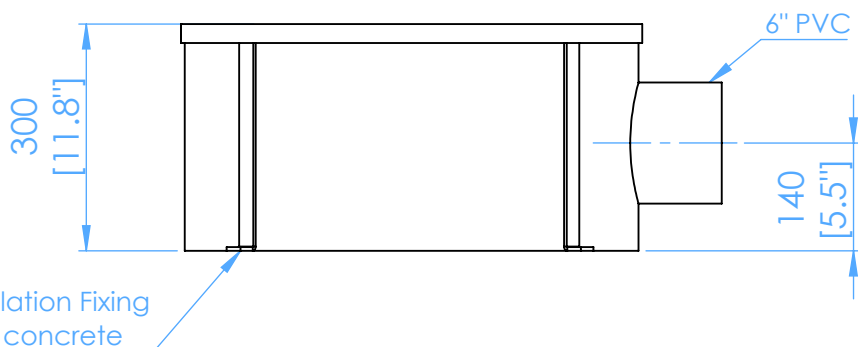
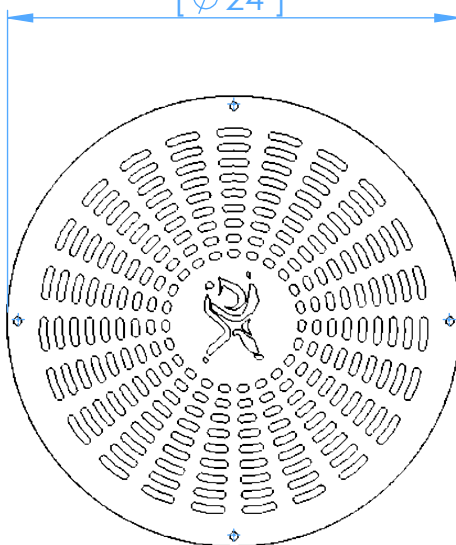
C

D

E

F

Ø 598
[Ø 24"]

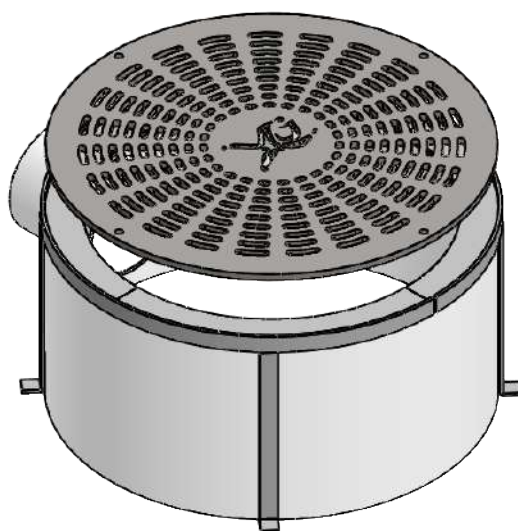


Body: Glass reinforced polyster material with non corrosive and chemical resistant 304/304L quality Stainless Steel

Grate: Stainless Steel
Drainage Pipe : 6" PVC
Drainage capacity : 250 gpm
Optional : Stainless Steel Strainer

Installation:

Hardware : Adustable 4x stainless steel M10 (3/8") Studs, with washers and nuts. also welded grounding M8 Bolt and nut.



Unless Otherwise Stated:
Linear Tol.: 2, Angular Tol.: 1
All Dimensions: mm [inch]
INTERPRET DIM AND TOL. PER ASME Y14.5-2009

Drawn by:

Jamil H.

Drawn Date:

17-Dec-19

Legal Owner:



WATER SPLASH

Checked/Approved by:

Checked/Approved Date:

Material:

See BoM

Description:

24" ROUND S.S DRAIN BODY

Part Number:

801.00.00076

Revision:

01

Projection Method:
THIRD ANGLE



Approx Weight:

30 Kg

Drawing Scale:

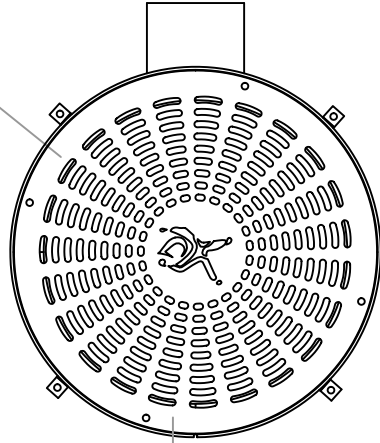
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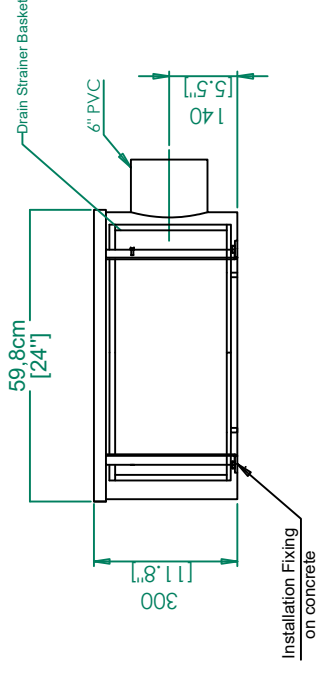
1 of 1

A4

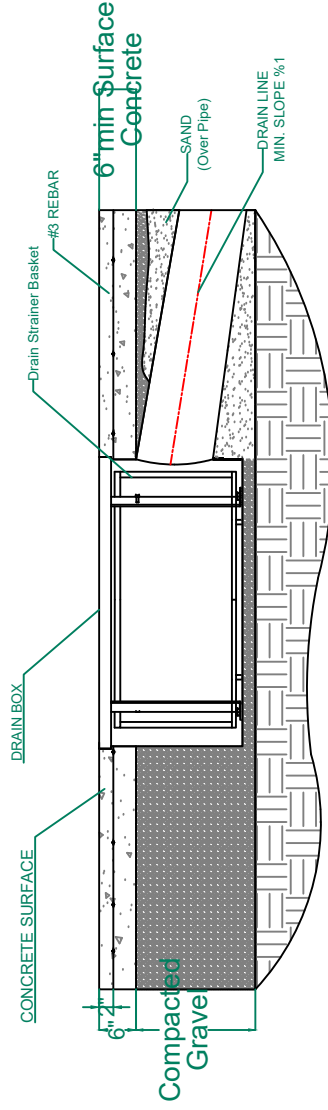
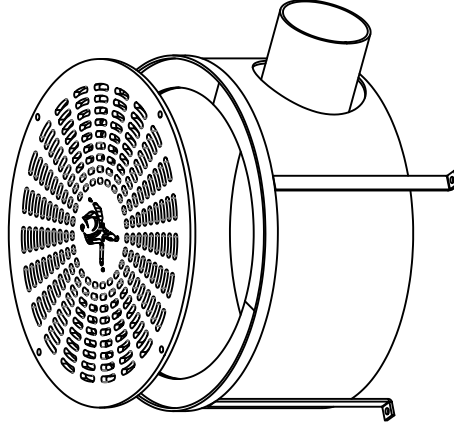
24" 10mm Stainless Steel Drain Cover



TOTAL AREA : 3,14 SQFT
 TOTAL OPENING AREA : 1,04 SQFT



Installation Fixing
 on concrete



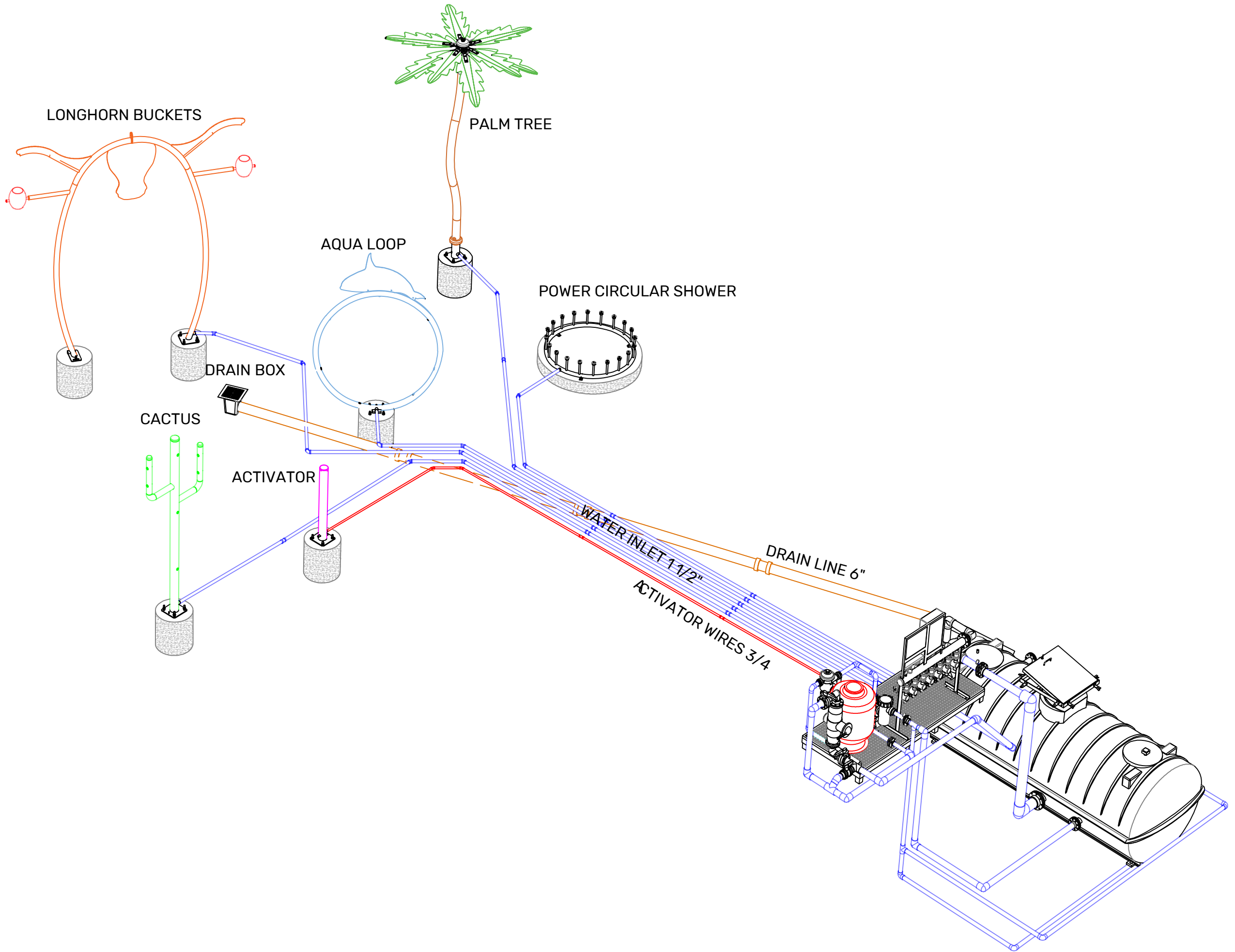
PROJECT NAME		DRAWN BY/ DATE	
24" DRAIN BOX		E.YAVUZ	
REV	0.1	UNIT	CM
		SHEET	



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RECIRCULATION SYSTEM



Splash park with Water Re-Capture system, re-uses water utilized at splash park by filtration and sanitizing constantly. This system is similar to swimming pool water sanitization system. Engineered to meet state / provincial health codes for swimming to pool/splash pads.

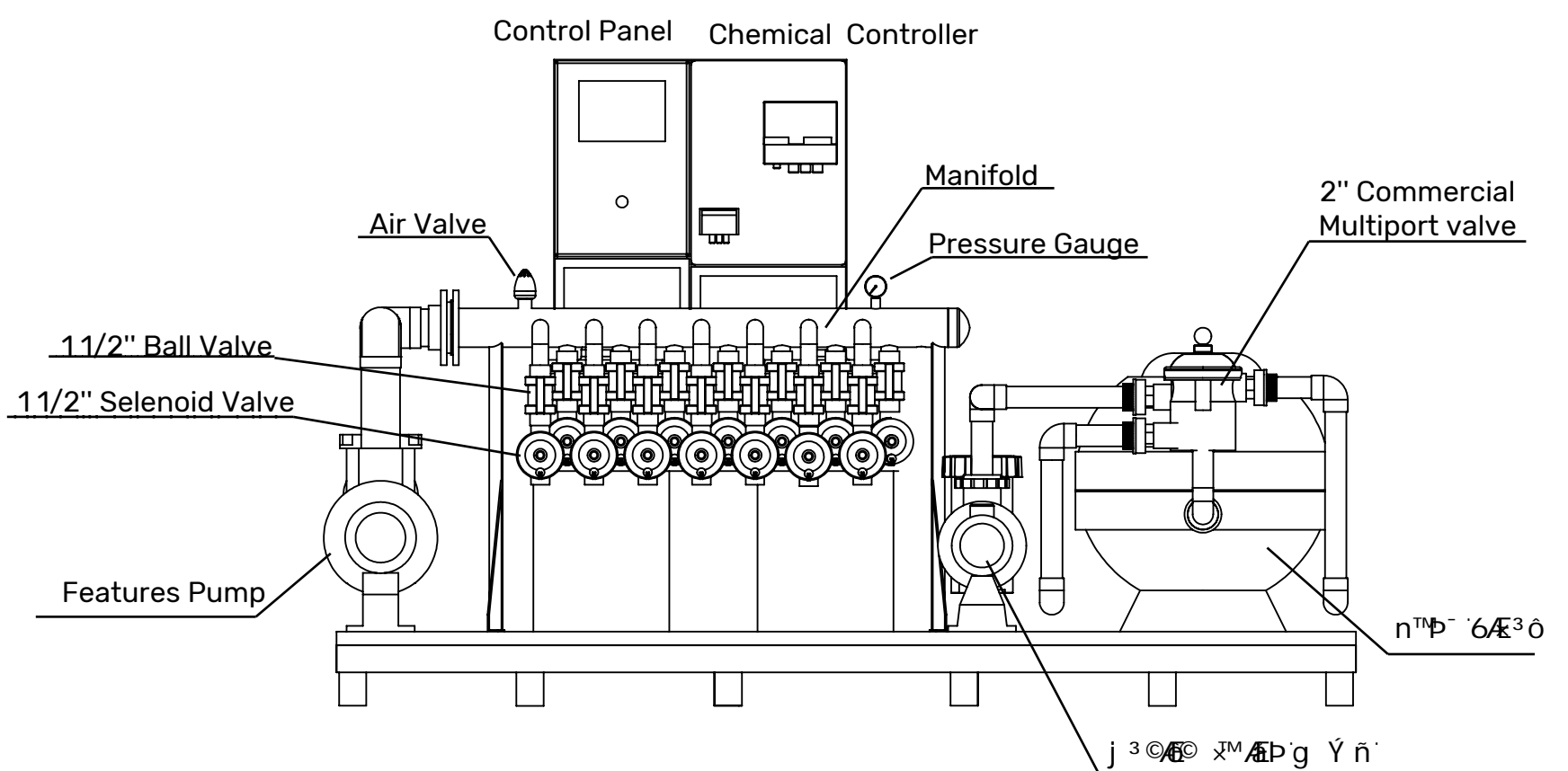
We offer tank sizes (1320,2500 and 4000) Gallons with 1" float valve for fresh water intake.

Stainless steel manifold

Electric controller

Factory assembled and tested pumps/sand filter and chemical controller kit.

Optional: UV



WATER WISE CONTROLLER

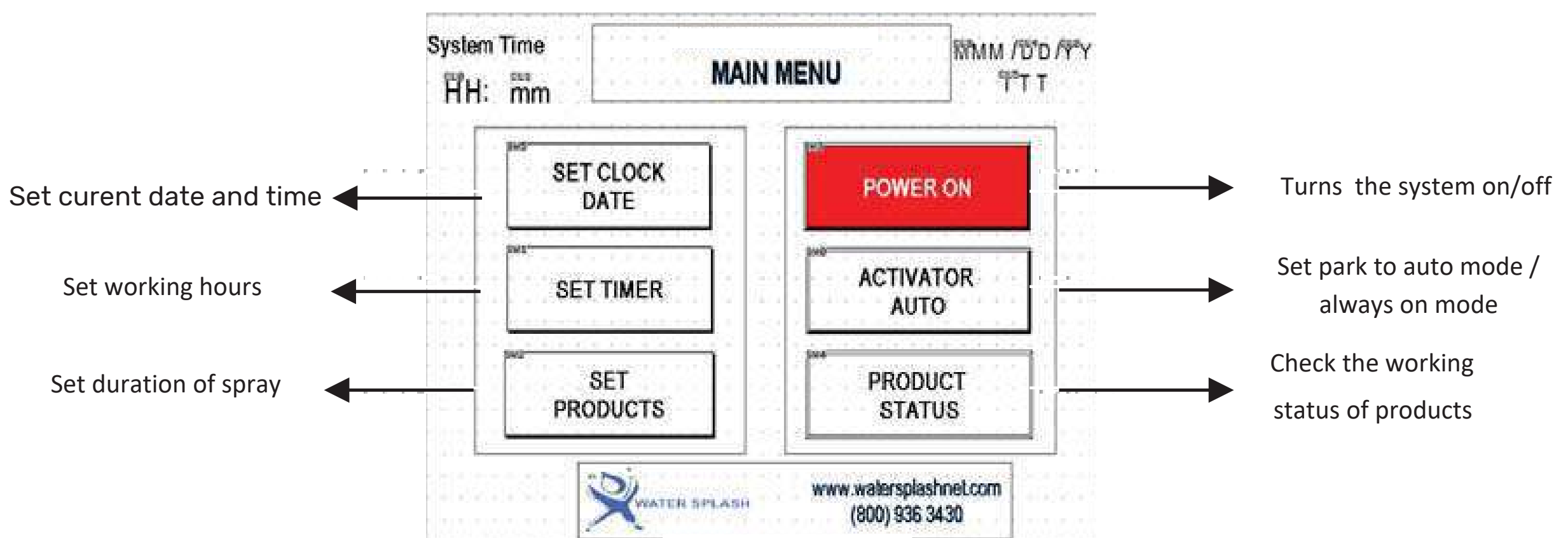


Water Wise Controller - Fiberglass enclosure has center PLC unit controlling each manifold line. Touch screen interface allows users to set desired programming setting for splash park.

Controller is user programmable and following functions can be programmed;

- 1- Current day and time
- 2- Setting active hours / always on
- 3- Activate products via activator or always on
- 4- Spray time
- 5- Up to five spray play sequences
- 6- Product selection per each sequence
- 7- Wind speed effect (optional)
- 8- Low water temperature on/off (optional)
- 9- Battery back up

Water Wise Controller



User Interface

The user interface is a fabulous touch screen, which is easy to use and operate. This user interface (UI) will allow the staff to control, monitor and maintain the use of the park and its products efficiently.



www.watersplashnet.com
(800) 936-3430

Water Splash Inc. guarantees that all products meet the specifications provided in the installation drawings and offers.

25 YEAR WARRANTY on stainless steel structures and workmanship, stainless steel anchoring systems and aluminum spheres, stainless steel Piping and Weldments.

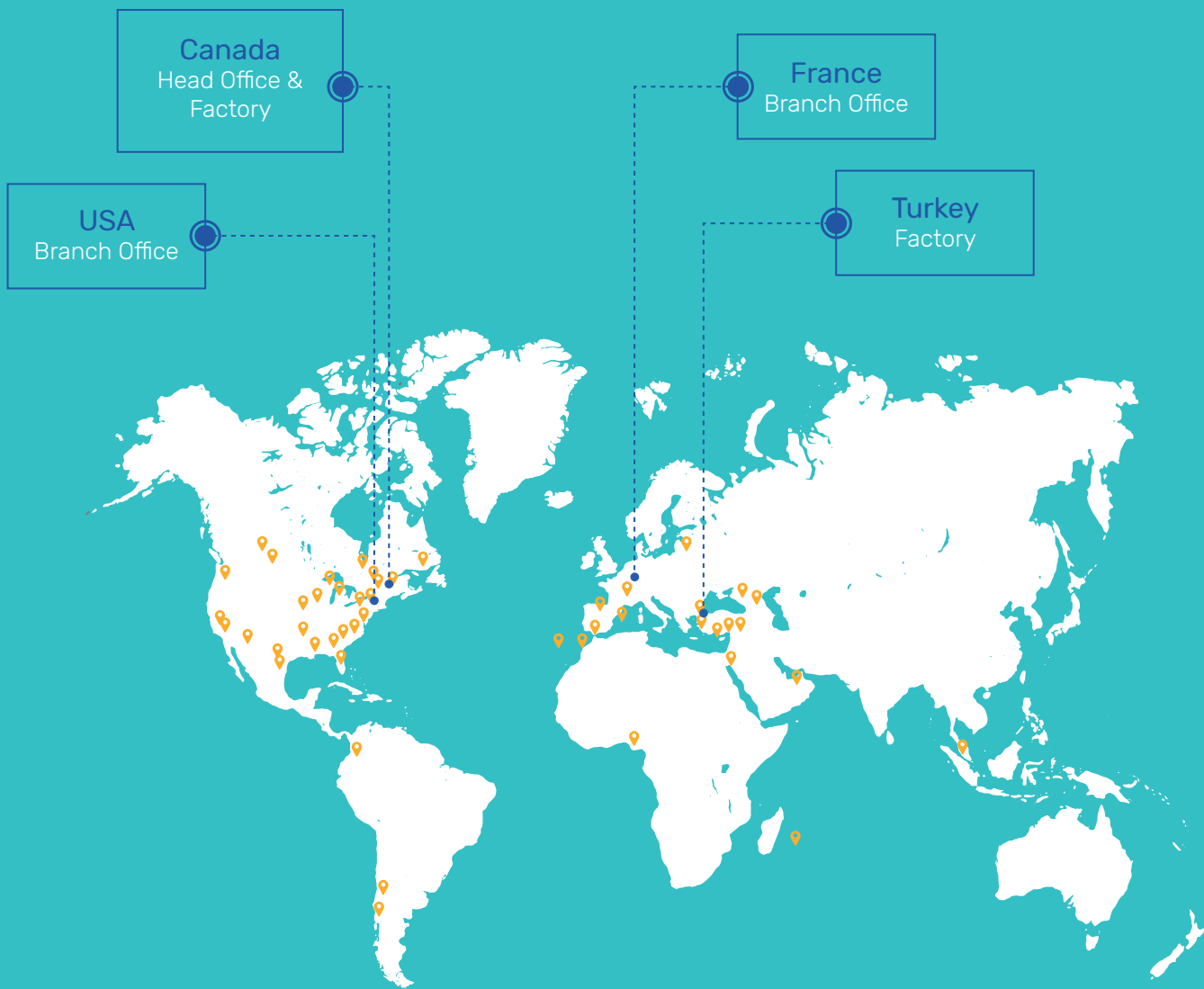
5 YEAR WARRANTY on Acetyl, Urethane/HPDE parts, spray nozzles and spray openings, high density polyethylene components, polyurethane components, stainless steel automated water distribution manifold, drain boxes and electrical enclosures.

2 YEAR WARRANTY on coatings (Airbrushed Graphics), powder coated, stainless steel hardware and moving parts, fiberglass components, see flow polymers (polycarbonate materials), toe guards, piping, fittings, ball valves, pressure gauges, terminal blocks, PLC controller, time switches, manual switches, transformers, breakers, electrical wiring, connections and on recirculation system workmanship, recirculation system pumps and filters are covered by their manufacturer. Please refer to their warranty documentation.

1 YEAR WARRANTY on all products and parts not listed above.

Warranty above is valid only if structures are installed or assembled as per Water Splash's installation instructions/drawings maintained according to maintenance manual and procedures, not subject to misuse, vandalism, operated under normal use as per designed purpose or have not modified/repared by unauthorized





WATERSPLASH INSTALLATIONS AROUND THE WORLD

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