SECTION 22 14 26

FACILITY STORM DRAINS

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\*\* NOTE TO SPECIFIER \*\* MIFAB, Inc.; roof and scupper drain grates.  
This section is based on the products of MIFAB, Inc., which is located at:1321 W. 119th St.Chicago, IL 60643Toll Free Tel: 800-465-2736Tel: 773.341.3030Fax: 773-341-3047 Email: [request info (sales@mifab.com )](https://arcat.com/rfi?action=email&company=MIFAB%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(15147mfb)%253A%2520&coid=38108&spec=15147mfb&rep=&fax=773-341-3047%2520)  
Web: <http://www.mifab.com>   
 [ [Click Here](https://arcat.com/company/mifab-inc-38108) ] for additional information.  
Manufacturer of Commercial and Industrial Plumbing and Drainage Products  
Servingall the USA, Canada, Australia, and the Middle East, MIFAB can provide you with the quality, engineered plumbing and drainage solutions you need. Innovative product designs save the installer time and material cost and provides the owner with higher quality cast stainless steel drains and cleanouts for the same cost as the industry standard nickel bronze.

1. GENERAL
   1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Parking Area / Mechanical Room Floor and Area Drains:
       1. Round parking area / mechanical room drains.
       2. Square parking area / mechanical room drains.
       3. Podium / overflow / planter drains.
    2. Roof Drains:
       1. Balcony roof drains.
       2. Dome type drains.
       3. Sump roof drains.
       4. Medium sump roof drains.
       5. Large sum roof drains.
       6. Downspout roof drains.
       7. Green drains.
       8. HYDROMAX drains.
       9. Other roof drains.
       10. RoofGuard drains.
       11. Scuppers.
       12. Sump roof drains.
    3. Trench Drains:
       1. Cast iron trench drains.
       2. Fiber reinforced concrete trench drains.
       3. Frame and grate trench drains.
       4. Plastic trench drains.
       5. Steel / stainless steel / aluminum trench drains.
  1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 22 05 00 - Common Work Results for Plumbing.
    2. Section 22 10 00 - Plumbing Piping.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00.
     2. Product Data:
        1. Manufacturer's data sheets on each product to be used.
        2. Preparation instructions and recommendations.
        3. Storage and handling requirements and recommendations.
        4. Typical installation methods.

\*\* NOTE TO SPECIFIER \*\* Delete if not applicable to product type.

* + 1. Verification Samples: Two representative units of each type, size, pattern, and color.
    2. Shop Drawings: Include details of materials, construction, and finish. Include relationship with adjacent construction.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum five years documented experience.
     2. Installer Qualifications: Company specializing in performing Work of this section with minimum two years documented experience with projects of similar scope and complexity.
     3. Source Limitations: Provide each type of product from a single manufacturing source to ensure uniformity.

\*\* NOTE TO SPECIFIER \*\* Include mock-up if the project size or quality warrant the expense. The following is one example of how a mock-up on might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Construct a mock-up with actual materials in sufficient time for Architect's review and to not delay construction progress. Locate mock-up as acceptable to Architect and provide temporary foundations and support.
       1. Intent of mock-up is to demonstrate quality of workmanship and visual appearance.
       2. If mock-up is not acceptable, rebuild mock-up until satisfactory results are achieved.
       3. Retain mock-up during construction as a standard for comparison with completed work.
       4. Do not alter or remove mock-up until work is completed or removal is authorized.
  1. PRE-INSTALLATION CONFERENCE
     1. Convene a conference approximately two weeks before scheduled commencement of the Work. Attendees shall include Architect, Contractor and trades involved. Agenda shall include schedule, responsibilities, critical path items and approvals.
  2. DELIVERY, STORAGE, AND HANDLING
     1. Store and handle in strict compliance with manufacturer's written instructions and recommendations.
     2. Protect from damage due to weather, excessive temperature, and construction operations.
  3. PROJECT CONDITIONS
     1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
  4. WARRANTY
     1. Manufacturer's standard limited warranty unless indicated otherwise.

\*\* NOTE TO SPECIFIER \*\* All products specified in PART 2 are base configurations for the given products. Each product has a wide range of options to meet any possible drainage needs. If required, go to the manufacturer's website for technical data sheets and more detailed information.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: MIFAB, Inc., which is located at:1321 W. 119th St.Chicago, IL 60643Toll Free Tel: 800-465-2736Tel: 773.341.3030Fax: 773-341-3047 Email: [request info (sales@mifab.com )](https://arcat.com/rfi?action=email&company=MIFAB%252C%252BInc.&message=RE%253A%2520Spec%2520Question%2520(15147mfb)%253A%2520&coid=38108&spec=15147mfb&rep=&fax=773-341-3047%2520);Web: <http://www.mifab.com>

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs: coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
    2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. PARKING AREA / MECHANICAL ROOM FLOOR AND AREA DRAINS

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Round Parking Area / Mechanical Room Drains:
       1. Product: F1240 Series Utility Drain. For warehouses, mechanical rooms, non-membrane finished areas and all types of finished floors. Ideal for shallow pour applications. Recommended for vehicular traffic areas. Body Height: 3 inches.
          1. Lacquered ductile iron, 1/2 inch thick, 6-1/2 inch dia. heavy duty ductile iron grate. Stainless steel screws.
          2. Pipe Sizes: 2, 3, and 4 inch.
       2. Product: F1300-C Drain. 7 inches dia. adjustable heavy duty tractor grate. For warehouses, mechanical rooms, parking garages and membrane finished areas and all types of poured finished floors. Membrane clamp to secure waterproofing membrane.
          1. Lacquered cast iron, anchor flange, clamp ring, primary and secondary weepholes for waterproofing membrane, and 1 inch thick, tractor grate.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
          3. Body Height: No Hub: 3 inches.
       3. Product: F1320-C Drain. 9 inches dia. Adjustable Tractor Grate Bucket. For warehouses, mechanical rooms, parking garages and membrane finished areas and all types of poured finished floors. Membrane clamp to secure waterproofing membrane.
          1. Lacquered cast iron, anchor flange, membrane clamp, primary and secondary weepholes for waterproofing membrane, and 1 inch thick, tractor grate.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       4. Product: F1320-C-TFB Drain. 9 inches dia. Adjustable Tractor Grate/Sediment Bucket. To intercept wastewater debris preventing drain line clogging. Sediment bucket must be replaced after cleaning. Grate cannot be set unless sediment bucket is in place.
          1. Laquered cast iron, anchor flange, 1 inch thick, tractor grate.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       5. Product: F1330C Drain. 9 inches dia. Adjustable Tractor Grate and Deep Sump. For warehouses, mechanical rooms, parking garages and membrane finished areas and all types of poured finished floors. Membrane clamp to secure waterproofing membrane.
          1. Lacquered cast, anchor flange, clamp ring, primary and secondary weepholes for waterproofing membrane, adjustable collar with deep sump body, and standard 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       6. Product: F1340 Drain. 12 inches dia. Adjustable Tractor Grate. For warehouses, mechanical rooms, parking garages and other non-membrane finished areas and all types of poured finished floors.
          1. Lacquered cast iron, anchor flange, weepholes, and adjustable collar with 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       7. Product: F1340-TFB Drain with 12 inches dia. Adjustable Tractor Grate/Sediment Bucket. To intercept wastewater debris preventing drain line clogging. The grate cannot be set unless the sediment bucket is in place.
          1. Lacquered cast iron, anchor flange, weepholes, and adjustable collar with 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       8. Product: F1340-Y-Q Shallow Sump Floor Drain with 12 inches dia. Tractor Grate. For heavy traffic areas; parking garages, factories and loading docks. Ideal for limited space poured in place concrete decks.
          1. Lacquered cast iron, anchor flange, nonadjustable grate top assembly with 1 inch thick, tractor grate. Pipe Sizes: 3, 4, and 6 inch.
       9. Product: F1350 Drain with 12 inches dia. Adjustable Grate/Extra Deep Sump. For warehouses, mechanical rooms, parking garages and non-membrane finished areas and all types of poured finished floors. Has capacity for heavy water flow.
          1. Lacquered cast iron, anchor flange, weepholes, adjustable collar and 1inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       10. Product: F1350-Y-36 Garbage Can Wash Drain. 12 inches dia. Adjustable Tractor Grate. For kitchens and all types of poured finished floors. Internal sediment bucket prevents solid and debris from entering drain line. Deep sump body allows heavy water flow.
           1. Lacquered cast iron, anchor flange, weepholes, extra deep sump body, 1/2 inch spray nozzle assembly, sediment bucket and 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       11. Product: F1360 Drain with 16 inch Adjustable Tractor Grate.
       12. Product: F1360-TFB Drain. 16 inches dia. Adjustable Deep Sump Tractor Grate/Sediment Bucket. Intercepts wastewater debris preventing drain line clogging. Grate cannot be set unless the sediment bucket is in place.
           1. Lacquered cast iron, anchor flange, weepholes, adjustable collar with 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       13. Product: F1370 Drain. 16 inches dia. Adjustable Tractor Grate and Extra Deep Sump. For warehouses, mechanical rooms, parking garages and non-membrane finished areas and all types of poured finished floors. Capacity for heavy water flow.
           1. Lacquered cast iron, anchor flange, weepholes, adjustable collar, 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       14. Product: F1530 Drain. 16 inches dia. Heavy Duty Tractor Grate/Deep Sump. For precast construction where core drilling or boxing out of drain is required. 9 inches dia. round tractor grate used with poured finished floors. Wide reinforced anchor flange.
           1. Lacquered cast iron, anchor flange, weepholes, membrane collar, and 1 inch thick, ductile iron tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       15. Product: F1540 Drain. 12 inch Heavy Duty Tractor Grate/Deep Sump and Heavy Duty Membrane Collar. For precast construction where core drilling or boxing out of drain is required. Used with all types of poured finished floors. Wide reinforced anchor flange.
           1. Lacquered cast iron, anchor flange, 20 inches dia. fixed, heavy duty membrane collar with weepholes and 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       16. Product: F1550 Drain. 16 inch Heavy Duty Tractor Grate/Deep Sump and Heavy Duty Membrane Collar. For precast construction where core drilling or boxing out of drain is required. Used with all types of poured finished floors. Wide reinforced anchor flange.
           1. Lacquered cast iron, anchor flange, weepholes, 20 inches dia. fixed, heavy duty membrane collar with weepholes and 1 inch thick, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Square Parking Area/Mechanical Room Drains:
       1. Product: F1420-C Drain. 8 inch square adjustable tractor grate. For warehouses, mechanical rooms, parking garages and other membrane finished areas and all types of poured finished floors. Membrane Clamp: For securing waterproofing membrane.
          1. Lacquered cast iron, anchor flange, primary and secondary weepholes for waterproofing membrane. Tractor Grate: 1 inch thick, 7-3/4 inch square. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       2. Product: F1430C Drain with 8" Adjustable Tractor Grate/Deep Sump. Used in warehouses, mechanical rooms, parking garages and other membrane finished areas. 8" square, adjustable tractor grate is used with all types of poured finished floors. Membrane clamp is provided to secure the waterproofing membrane. Deep sump body provides capacity for heavy water flow.
          1. Specification: MIFAB Series F1430C lacquered cast iron floor drains with anchor flange, cast iron clamp ring with primary and secondary weepholes for waterproofing membrane, adjustable collar with deep sump body, and standard 1 inch thick, 7-3/4 inch square, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       3. Product: F1440 Drain with 12 inches Adjustable Tractor Grate. Used in warehouses, mechanical rooms, parking garages and other non-membrane finished areas. 12" square, adjustable tractor grate is used with all types of poured finished floors.
          1. Specification: MIFAB Series F1440 lacquered cast iron deep sump floor drains with anchor flange, weepholes, and adjustable collar with standard 1 inch thick, 12 inches hinged square, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       4. Product: F1440-Y-Q Drain with 12 inches Non-Adjustable Tractor Grate. Used in heavy traffic areas such as parking garages, factories and loading docks. Shallow body is ideal for poured in place concrete decks where space is limited.
          1. lacquered cast iron shallow sump floor drains with anchor flange and nonadjustable grate top assembly with standard 1 inch thick, 12 inches square, tractor grate. Pipe Sizes: 3, 4, and 6 inch.
       5. Product: F1450 Drain with 12 inches Adjustable Tractor Grate/Extra Deep Sump. Used in warehouses, mechanical rooms, parking garages and other non-membrane finished areas. 12 inch square, adjustable tractor grate is used with all types of poured finished floors. Deep sump body provides capacity for heavy water flow.
          1. lacquered cast iron floor drain with anchor flange, weepholes, and adjustable collar with extra deep sump body and standard 1 inch thick, 12 inches hinged square, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       6. Product: F1460 Drain with 15 inches Adjustable Tractor Grate/Deep Sump. : Used in warehouses, mechanical rooms, parking garages and other non-membrane finished areas. 15-3/4 inch square, adjustable tractor grate is used with all types of poured finished floors.
          1. lacquered cast iron deep sump floor drain with anchor flange, weepholes, and adjustable collar with standard 1 inch thick, 15-3/4 inch square, tractor grate.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       7. Product: F1470 Drain with 12 inches Adjustable Tractor Grate/Extra Deep Sump. Used in warehouses, mechanical rooms, parking garages and other non-membrane finished areas. 15-3/4 inch square, adjustable tractor grate is used with all types of poured finished floors. Deep sump body provides capacity for heavy water flow
          1. lacquered cast iron floor drain with anchor flange, weepholes, and adjustable collar with extra deep sump body and standard 1 inch thick, 15-3/4 inch square, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       8. Product: F1480(-FL) Drain with 12 inches Heavy Duty Tractor Grate/Deep Sump. Used in industrial factories, mechanical rooms, parking garages and other non-membrane finished areas. 12 inches square tractor grate is used with all types of poured finished floors. Hinged grate permits easy access to sediment bucket.
          1. epoxy coated large capacity floor drain with deep sump body, and standard 1 inch thick, 12 inches hinged square, (specify material finish) tractor grate with free area of 51 square inches. Pipe Sizes: 2, 3, 4, and 6 inch.
       9. Product: F1490(-FL) Drain with 16 inches Heavy Duty Tractor Grate/Deep Sump. Used in industrial factories, mechanical rooms, parking garages and other non-membrane finished areas. 15-3/4 inch square tractor grate is used with all types of poured finished floors. Hinged grate permits easy access to sediment bucket.
          1. epoxy coated large capacity floor drain with deep sump body, and standard 1 inch thick, 15-3/4 inch square, tractor grate with free area of 75 square inches.
          2. Pipe Sizes: 2, 3, 4, and 6 inch.
       10. Product: F1510 Drain with 12 inches Heavy Duty Tractor Grate/Deep Sump. : Used in mechanical rooms, parking garages and other membrane finished areas. 12 inch square, adjustable tractor grate is used with all types of poured finished floors. Hinged grate permits easy access to sediment bucket. Surface membrane clamp is ideal for areas that have a surface membrane.
           1. lacquered cast iron floor drain with deep sump body, wide anchor flange, weepholes, and adjustable collar with square heavy duty ductile iron hinged tractor grate with four piece surface membrane clamp, sediment bucket and free area of 51 square inches. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       11. Product: F1560 Heavy Duty Drain with Internal Trap. Used in industrial factories, mechanical rooms, parking garages and other membrane finished areas. 12 square tractor grate is used with all types of poured finished floors. Hinged grate permits easy access to sediment bucket. The anchor flange provides maximum support for drain.
           1. extra heavy duty lacquered area drain with side outlet body, internal deep seal trap and cleanout, seepage pan, standard 1 inch thick, 12 inches square heavy hinged grate and suspended sediment bucket. Pipe Sizes: 2, 3, 4, and 6 inch.
       12. Product: F1760-FL Heavy Duty Drain with Anchor Flange. Used in membrane floor and trench areas that have width limitations for surface drainage. Long rectangular grate has large free area to drain surface water quickly.
           1. Lacquered cast iron heavy duty gutter drain with ductile iron grate and anchor flange. Pipe Sizes: 2, 3, and 4 inch

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Podium / Overflow / Planter Drains:
       1. Product: F1100-C-4POD Planter Podium Drain. Typically used in planters which are integrated into various locations across the podium. Planters require a secondary concrete pour -over the podium's primary drainage membrane. MIFAB's system allows the use of a second drain body to property drain and waterproof the interior of the planter.
          1. Lacquered cast iron floor drain with anchor flange, high rough in membrane clamp, extension body, drain body clamp and standard satin finished nickel bronze strainer with vandal resistant stainless steel.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       2. Product: F1100-C-PLA Planter Podium Drain. Typically used in planters which are integrated into various locations across the podium. Planters require a secondary concrete pour - over the podium's primary drainage membrane. MIFAB's system allows the use of a second drain body to property drain and waterproof the interior of the planter
          1. Lacquered cast iron floor drain with anchor flange, high rough-in membrane clamp, extension body, drain body clamp and standard satin finished nickel bronze strainer with vandal resistant stainless steel allen key screws.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       3. Product: F1100-C-POD Podium Drain. Used at grade level, below grade level and for pet relief areas. MIFAB's podium drain system allows full unrestricted drain flow of water off the drain board into the sump of the drain body while properly securing the membrane around the entire body (not just at some anchor points) - providing 100% clamping of the membrane around the drain opening. The installer typically has the option of trimming out the strainer to finish grade or below the pavers.
          1. Lacquered cast iron floor drain with anchor flange, high rough-in membrane clamp, drain clamp and standard satin finished nickel bronze strainer with vandal resistant stainless steel allen key screws.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       4. Product: F1810 Planting Area Drain. Used in areas such as flower boxes and others where the drain is buried underground. The stainless steel mesh screen covered dome prevents fines from entering the drain line. Membrane clamp is provided to secure the waterproofing membrane.
          1. Lacquered cast iron planting area drain with anchor flange, cast iron waterproofing membrane clamp ring, and standard self-locking cast dome strainer with stainless steel mesh screen. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       5. Product: F1820 Large Planting Area Drain. Used to drain water that accumulates in planting or flower boxes. The stainless steel mesh covered aluminum dome prevents fines from entering the drain line
          1. Lacquered cast iron deep sump large planting area drain with anchor flange, cast iron waterproofing membrane clamp ring, and low profile, self-locking aluminum dome strainer with stainless steel mesh screen.
          2. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       6. Product: F1830-P Planting Area Drain with 8 inches High Perforated Standpipe and Dome. Used in areas such as flower boxes and others where the drain is buried underground. Perforated standpipe allows for sub surface drainage of water. The stainless steel dome secured to the top of the standpipe is set at ground level and permits the drainage of excess surface water. Membrane clamp is provided to secure the waterproofing membrane.
          1. Lacquered cast iron standpipe type planting area drain with anchor flange, cast iron membrane clamp ring with primary and secondary weepholes for waterproofing membrane, and adjustable 4 inch dia. ABS perforated standpipe and stainless steel secured dome. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       7. Product: F1830-PL Large Planting Area Drain with 8 inches High Perforated Standpipe and Dome. Used in areas such as flower boxes and others where the drain is buried underground. Perforated standpipe allows for sub surface drainage of water. The stainless steel dome secured to the top of the standpipe is set at ground level and permits the drainage of excess surface water. Membrane clamp is provided to secure the waterproof ring membrane.
          1. Lacquered cast iron standpipe type planting area drain with anchor flange, cast iron membrane clamp ring with primary and secondary weepholes for waterproofing membrane, and adjustable 4 inch dia. ABS perforated standpipe and stainless steel secured dome. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       8. Product: F1840 Planting Drain W/9 Adjustable Tractor Grate with Stainless Steel Ballast Guard. : Used in areas such as flower boxes and others where water is required to drain through the soil surrounding the drain. Perforated standpipe allows for sub surface drainage of water. The stainless steel ballast guard prevents fines from entering the drain line. 9 inches round, adjustable tractor grate is set at ground level and permits the drainage of excess surface water. Membrane clamp is provided to secure the waterproofing membrane.
          1. Lacquered cast iron planting area drain with anchor flange, cast iron membrane clamp ring with primary and secondary weepholes for waterproofing membrane, stainless steel ballast guard, and standard 1 inch thick, 9 inches round, tractor grate. Pipe Sizes: 2, 3, 4, 5, and 6 inch.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. ROOF DRAINS

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Balcony Roof Drains: For balconies, cornices, parapets to drain rainwater.
       1. Product: R1400 Balcony Drain with Threaded Bottom Outlet.
          1. Membrane Clamp Ring: Bolted to body for easy strainer removal without affecting the water proofing membrane.
          2. Material: Lacquered cast iron. Adjustable Dome Strainer: Nickel bronze.
          3. Pipe Sizes: 2, 3, and 4 inch.
       2. Product: R1410 Balcony Drain with Threaded 45 Degrees Angled Outlet.
          1. Membrane Clamp Ring: Bolted to body for easy strainer removal without affecting the water proofing membrane.
          2. Material: Lacquered cast iron. Adjustable Dome Strainer: Nickel bronze.
          3. Pipe Sizes: 2, 3, and 4 inch.
       3. Product: R1420 Balcony Drain with Large Threaded Angled Side Outlet.
          1. Membrane Clamp Ring: Bolted to body for easy strainer removal without affecting the water proofing membrane.
          2. Material: Lacquered cast iron. Adjustable Dome Strainer: Nickel bronze.
          3. Pipe Sizes: 2, 3, and 4 inch.

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* + 1. Dome Type: Used on any type of flat roofs and gutters.
       1. Product: R1100 Standard Sump Roof Drain.
          1. Body Dia.: 8 inches. Ideal for applications with limited space.
          2. Dome Strainer: Efficient drainage of rainwater. Prevents debris from entering drain line. Self-locking polyethylene strainer. Free Area: 43 sq inches.
          3. Anchor Flange and Membrane Clamp: Tongue in groove design for secure grip of membrane and roof flashing materials.
          4. Material: Lacquered cast iron. Anchor flange. Membrane Clamp Ring: Cast iron. Integral gravel stop.
          5. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       2. Product: R1100-90 Small Sump Roof Drain / Threaded Side Outlet.
          1. Body Dia.: 8 inches. Ideal for applications with limited space.
          2. Dome Strainer: Efficient drainage of rainwater. Prevents debris from entering drain line. Self-locking polyethylene strainer. Free Area: 43 sq inches.
          3. Anchor Flange and Membrane Clamp: Tongue in groove design for secure grip of membrane and roof flashing materials.
          4. Material: Lacquered cast iron. Anchor flange. Membrane Clamp Ring: Cast iron. Integral gravel stop.
          5. Pipe Sizes: 2, 3, and 4 inch.
       3. Product: R1100-EU Small Sump Roof Drain for Insulated Roof Deck.
          1. Adjustable extension System : Adjusts to insulation thickness on top of roof deck without gaskets. Body is elevated off the roof deck. No need for bearing pans or sump receivers.
          2. Body Dia.: 8 inches. Ideal for applications with limited space.
          3. Dome Strainer: Efficient drainage of rainwater. Prevents debris from entering drain line. Self-locking polyethylene strainer. Free Area: 43 sq inches.
          4. Anchor Flange and Membrane Clamp: Tongue in groove design for secure grip of membrane and roof flashing materials.
          5. Material: Lacquered cast iron. Anchor flange. Membrane Clamp Ring: Cast iron. Integral gravel stop.
          6. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       4. Product: R1100-F Small Sump Roof Drain / Parabolic Weir.
          1. Accuflow parabolic weirs reduce volume of water to the leader. Specify one, two or three slots to attain required limitation of volume. Flow Performance per Weir: 5 GPM per inch of water per slot.
          2. Body Dia.: 8 inches. Ideal for applications with limited space.
          3. Dome Strainer: Efficient drainage of rainwater. Prevents debris from entering drain line. Self-locking polyethylene strainer. Free Area: 43 sq inches.
          4. Anchor Flange and Membrane Clamp: Tongue in groove design for secure grip of membrane and roof flashing materials.
          5. Material: Lacquered cast iron. Anchor flange. Membrane Clamp Ring: Cast iron. Integral gravel stop.
          6. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       5. Product: R1100-G Small Sump Roof Drain Ballast Guard for IRMA Roofs.
          1. Ballast Guard: 6 inch high perforated stainless steel to retain crushed gravel used in flat roof construction. 1/2 inch dia. holes allow for drainage without clogging.
          2. Body Dia.: 8 inches. Ideal for applications with limited space.
          3. Dome Strainer: Efficient drainage of rainwater. Prevents debris from entering drain line. Self-locking polyethylene strainer. Free Area: 43 sq inches.
          4. Anchor Flange and Membrane Clamp: Tongue in groove design for secure grip of membrane and roof flashing materials.
          5. Material: Lacquered cast iron. Anchor flange. Membrane Clamp Ring: Cast iron. Integral gravel stop.
          6. Pipe Sizes: 2, 3, 4, 5, and 6 inch
       6. Product: R1100-JC Small Sump Roof Drain Stainless Steel Ballast Guard for IRMA Roofs.
          1. Ballast Guard: 6 inch high perforated stainless steel to retain crushed gravel used in flat roof construction. 1/2 inch dia. holes allow for drainage without clogging.
          2. Body Dia.: 8 inches. Ideal for applications with limited space.
          3. Dome Strainer: Efficient drainage of rainwater. Prevents debris from entering drain line. Self-locking polyethylene strainer. Free Area: 43 sq inches.
          4. Anchor Flange and Membrane Clamp: Tongue in groove design for secure grip of membrane and roof flashing materials.
          5. Material: Lacquered cast iron. Anchor flange. Membrane Clamp Ring: Cast iron. Integral gravel stop.
          6. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       7. Product: R1100-PJ Small Promenade Deck Drain with Stainless Steel Ballast Guard.
          1. Square Top: 8 inch square, 1 inch thick adjustable ductile iron tractor grate blends in with tile and brick patterns. 3/8 inch drainage slots prevent debris from entering drain line. Stainless steel perforated extension.
          2. Body Dia.: 8 inches. Ideal for applications with limited space.
          3. Dome Strainer: Efficient drainage of rainwater. Prevents debris from entering drain line. Self-locking polyethylene strainer. Free Area: 43 sq inches.
          4. Anchor Flange and Membrane Clamp: Tongue in groove design for secure grip of membrane and roof flashing materials.
          5. Material: Lacquered cast iron. Anchor flange. Membrane Clamp Ring: Cast iron. Integral gravel stop.
          6. Pipe Sizes: 2, 3, 4, 5, and 6 inch.

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete product not required.

* + 1. Dome Type, Combined Small Sump Roof Drains: Any type of flat roofs and gutters. For conventional or flat roofs where safety overflow, which receives water only when the accumulation is greater than the height of the standpipe is required to be located beside a standard roof drain. The standpipe can be adjusted to attain the desired overflow water depth.
       1. Product: R1150 Combined Small Sump Roof Drain and Secondary Overflow System.
          1. A one piece lacquered cast iron drain body with integral sump receiver. Cast iron waterproofing membrane clamp rings with integral gravel stops. One 2-1/2 inch high integral cast iron overflow standpipe.
          2. Dome provides for efficient drainage of rainwater and prevents debris from entering the drain line.
          3. Anchor flange and membrane clamp with tongue in groove design provides for secure grip of membrane and roof flashing materials
          4. Two self-locking metal dome strainers with a free area of 43 square inches each.
          5. Pipe Sizes: 2, 3, and 4, inch
       2. Product: R1150-SPEC Combined Small Sump Roof and Secondary Overflow System with Loose Set Sump Receiver.
          1. A galvanized sump receiver. Two lacquered cast iron roof drain bodies with anchor flanges. Cast iron waterproofing membrane clamp rings with integral gravel stops. One 4 inch dia. adjustable ABS overflow standpipe.
          2. Dome provides for efficient drainage of rainwater and prevents debris from entering the drain line.
          3. Anchor flange and membrane clamp with tongue in groove design provides for secure grip of membrane and roof flashing materials
          4. Two self-locking metal dome strainers with a free area of 43 square inches each.
          5. Pipe Sizes: 2, 3, and 4, inch.

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* + 1. Sump Roof Drains
       1. Product: R1200-JD Large Sump Replacement Roof Drain. Used on flat roofs replacing existing Josam, Smith, Wade or Zurn large sump roof drains.
          1. Dome Strainer: Self-locking, cast iron. Free Area: 103 sq inches. Prevents debris from entering the drain line.
          2. Material: Lacquered cast iron large sump roof drain.
          3. Pipe Sizes: 3, 4, and 6 inch.
       2. Product: R1200-JD-STR Large Sump Roof Drain with Extension Hardware and Sump Pan; New or Replacement. Range: 3/4 to 8 inches; for various insulation heights.
          1. Anchor Flange: 15 inches dia. Cast iron membrane clamp ring with four bolt pattern. Integral gravel stop.
          2. Sump Pan: W/A8-BP-STR lacquered 18 gauge 30 x 30 inch and HS-8 hardware. Slots around sump pan base permit system to be secured to top of the deck.
          3. Dome Strainer: Self-locking, cast iron. Free Area: 103 sq inches. Prevents debris from entering the drain line.
          4. Material: Lacquered cast iron large sump roof drain.
          5. Pipe Sizes: 3, 4, and 6 inch.
       3. Products: R1200-R Large Sump Roof Drain with Water Dam. Used in flat roofs where constant water height is required. Also used as an emergency overflow, draining water when water depth on roof exceeds the water dam height.
          1. Extra wide anchor flange. Membrane clamp with tongue in groove design for secure grip of membrane and roof flashing materials.
          2. Dome Strainer: Self-locking, cast iron. Free Area: 103 sq inches. Prevents debris from entering the drain line.
          3. Material: Lacquered cast iron large sump roof drain.
          4. Pipe Sizes: 3, 4, and 6 inch.
       4. Product: R1200-SO Large Sump Dual Outlet Drain. : Used on flat roofs.
          1. Extra wide anchor flange. Membrane clamp with tongue in groove design for secure grip of membrane and roof flashing materials.
          2. Outlets: No Hub side and bottom.
          3. Anchor Flange: 15 inches dia., cast iron clamp ring. Integral gravel stop.
          4. Dome Strainer: Self-locking, cast iron. Free Area: 103 sq inches. Prevents debris from entering the drain line.
          5. Material: Lacquered cast iron large sump roof drain.
          6. Pipe Sizes: 3, 4, and 6 inch.

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete product not required.

* + 1. Medium sump Roof Drains: For any type of flat roofs where medium sized drain is required.
       1. Product: R1220 Medium Sump Roof Drain.
          1. Lacquered cast iron medium sump roof drain.
          2. Anchor Flange: 12 inches dia.
          3. Membrane Clamping Ring: Cast iron with deep groove secure grip of membrane and roof flashing materials. Integral gravel stop.
          4. Dome Strainer: Self-locking, cast iron. Free Area: 71.50 square inches.
          5. Pipe Sizes: 2, 3, 4, and 6 inch.
       2. Product: R1220-EU Medium Sump Extension Roof Drain. Adjustable to insulation thickness on top of roof deck without needing gaskets. Body is elevated off the roof deck eliminating need bearing pans or sump receivers. Adjustable cast iron extension flange. Underdeck clamp.
          1. Lacquered cast iron medium sump roof drain.
          2. Anchor Flange: 12 inches dia.
          3. Membrane Clamping Ring: Cast iron with deep groove secure grip of membrane and roof flashing materials. Integral gravel stop.
          4. Dome Strainer: Self-locking, cast iron. Free Area: 71.50 square inches.
          5. Pipe Sizes: 2, 3, 4, and 6 inch.
       3. Product: R1220-G Medium Sump Roof Drain with Stainless Steel Ballast Guard for IRMA Roofs. Ballast Guard: 5 inch high stainless steel. Stops ballast from entering drain line.
          1. Lacquered cast iron medium sump roof drain.
          2. Anchor Flange: 12 inches dia.
          3. Membrane Clamping Ring: Cast iron with deep groove secure grip of membrane and roof flashing materials. Integral gravel stop.
          4. Dome Strainer: Self-locking, cast iron. Free Area: 71.50 square inches.
          5. Pipe Sizes: 2, 3, 4, and 6 inch.
       4. Product: R1220-JC Medium Sump Roof Drain with Stainless Steel Ballast Guard for IRMA Roofs. Ballast Guard: 6 inch high stainless steel with 1/2 inch dia. drainage openings. Stops ballast from entering drain line.
          1. Lacquered cast iron medium sump roof drain.
          2. Anchor Flange: 12 inches dia.
          3. Membrane Clamping Ring: Cast iron with deep groove secure grip of membrane and roof flashing materials. Integral gravel stop.
          4. Dome Strainer: Self-locking, cast iron. Free Area: 71.50 square inches.
          5. Pipe Sizes: 2, 3, 4, and 6 inch.
       5. Product: R1220-R Medium Sump Drain with Integral Water Dam. For flat roofs where a constant height of water is required. Also used as an emergency overflow, draining water when the depth of the water on the roof exceeds the water dam height. Dome strainer provides rainwater drainage and prevents debris from entering drain.
          1. Lacquered cast iron medium sump roof drain.
          2. Anchor Flange: 12 inch dia.
          3. Membrane Clamping Ring: Cast iron with deep groove secure grip of membrane and roof flashing materials and 2 inch high cast iron integral water dam.
          4. Dome Strainer: Self-locking, cast iron. Free Area: 71.50 square inches.
          5. Pipe Sizes: 2, 3, 4, and 6 inch.
       6. Product: R1250 Extra Large Sump High Flow Drain. : Used in any type of flat roofs. Extra deep sump body and large free area dome provides for high flow drainage of rainwater and prevents debris from entering the drain line. Extra wide anchor flange and membrane clamp with tongue in groove design provides for secure grip of membrane and roof flashing materials.
          1. Lacquered cast iron extra deep sump high flow roof drain.
          2. Anchor Flange: 15 inch dia.
          3. Membrane Clamping Ring: Cast iron with deep groove secure grip of membrane and roof flashing material. Integral gravel stop.
          4. Dome Strainer: Self-locking, polyethylene. Free Area: 125 square inches.
          5. Pipe Sizes: 2, 3, 4, 5, and 6 inch.

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* + 1. Large Sump Roof Drain: Used in any type of roofs.
       1. Product: R1200 Large Sump Roof Drain.
          1. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          2. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          3. Lacquered cast iron deep sump roof drain.
          4. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          5. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       2. Product: R1200-90 Large Sump Roof Drain with threaded Side Outlet:
          1. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          2. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          3. Lacquered cast iron deep sump roof drain.
          4. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          5. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       3. Product: R1200-BUV Large Sump Roof Drain with Fixed Extension, Sump Receiver and Deck Clamp.
          1. Fixed Gasketed Extension: Available in depths to match with insulation. Underdeck clamp.
          2. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          3. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          4. Lacquered cast iron deep sump roof drain.
          5. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          6. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       4. Product: R1200-EU Large Sump Roof Drain with Adjustable Extension. Adjustable to insulation thickness on top of the roof deck without needing gaskets.
          1. Elevated body off roof deck eliminates bearing pan or sump receiver needs.
          2. Adjustable cast iron extension flange and underdeck clamp.
          3. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          4. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          5. Lacquered cast iron deep sump roof drain.
          6. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          7. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       5. Product: R1200-F Large Sump Flow Controlled Roof Drain with Parabolic Weir. Controls rainwater of the roof.
          1. Parabolic Slotted Weirs: Reduce water volume to the leader. Specify one, two or three slots to attain required limitation of volume. Flow Performance per Weir: 10 GPM per inch of water per slot.
          2. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          3. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          4. Lacquered cast iron deep sump roof drain.
          5. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          6. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       6. Product: R1200-G Large Sump Roof Drain with Stainless Steel Ballast Guard. For roofs that use the insulated membrane assembly method of waterproofing (I.R.M.A.).
          1. Ballast Guard: 6 inch high perforated stainless steel. 1/2 inch dia. holes allow drainage without clogging.
          2. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          3. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          4. Lacquered cast iron deep sump roof drain.
          5. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          6. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       7. Product: R1200-HC Large Sump Roof Drain with Ballast Guard. For roofs that use the insulated membrane assembly method of waterproofing (I.R.M.A.).
          1. Adjustable Ballast Guard: Retains crushed gravel used in flat roof construction. Provides a 1-1/2 inch range of adjustment relative to insulation thickness. Slots allow for drainage without clogging.
          2. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          3. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          4. Lacquered cast iron deep sump roof drain.
          5. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          6. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       8. Product: R1200-JC Large Sump Roof Drain with High Stainless Steel Ballast Guard. For roofs using the insulated membrane assembly method of waterproofing (I.R.M.A.).
          1. Ballast Guard: 6 inch high, retains crushed gravel used in flat roof construction. 1/2 inch round drainage openings
          2. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          3. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          4. Lacquered cast iron deep sump roof drain.
          5. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          6. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       9. Product: R1200-W Large Sump Roof Drain with Adjustable Internal Standpipe Dam. Used in flat roofs where a constant height of water is required. Also used as a safety overflow on conventional roofs, draining water when the depth of water on the roof exceeds the standpipe height.
          1. Standpipe dam can be cut to required water depth.
          2. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
          3. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
          4. Lacquered cast iron deep sump roof drain.
          5. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
          6. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       10. Product: R1200-Z Large Sump Dexotex Roof Drain with Wide Deck Flange for a Liquid Membrane Roof. Used in flat roofs and decks designed for promenade or recreational areas where traffic bearing roof deck covering is used.
           1. Anchor: 20 inches dia. Cast iron membrane clamp ring. Integral gravel stop.
           2. Large Free Area Dome: For rainwater drainage. Stops debris from entering drain line.
           3. Anchor Flange: Extra wide tongue in groove membrane clamp for secure grip of membrane and roof flashing materials.
           4. Lacquered cast iron deep sump roof drain.
           5. Dome Strainer: Self-locking polyethylene. Free Area: 125 sq inches.
           6. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.

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* + 1. Downspout Roof Drains:
       1. Product: R1500 Downspout Boots: A transition piece connecting sheet metal exposed downspouts to underground cast soil piping. Solid cast iron construction ensures the bottom part of the exposed downspout is protected from damage.
          1. Lacquered cast iron. Wall securing clamp and hardware.
          2. Body Sizes: 4 x 3 and 5 x 4 inch. 4 inches dia.
       2. Product: R1940 Downspout Nozzle. For parapet overflow, or at wall base where a concealed leader discharges rainwater to the ground. Directs water away from wall A wall anchor flange covers the rough opening and anchors the body.
          1. Body: Nickel bronze. Outlet: Threaded. Wall anchor flange with countersunk holes and decorative outlet nozzle. Pipe Sizes: 2, 3, 4, 5, 6, 8, 10, and 12 inch.
       3. Product: R1940-SJ Downspout Nozzle with Slip Joint Inlet: The inlet is machined out allowing cast iron or PVC pipe to extend past the face of the finished wall and rest against the pipe stop. Pipe is secured via three vandal proof screws.
          1. Body: Nickel bronze or stainless steel. Slip joint inlet. Wall anchor flange with countersunk holes and decorative outlet nozzle. Pipe Sizes: 2, 3, 4, 5, 6, 8, 10, and 12 inch.
       4. Product: R1960 Downspout Nozzle with Perforated Cover. Downspout cover on wall where overflow roof drains discharge rainwater to the ground. Round stainless steel frame with perforated stainless steel hinged bird screen strainer.
          1. Standard or flush models. Made to receive PVC, ABS or cast iron pipe.
          2. Pipe Sizes: 2, 3, 4, 5, 6, 8, 10, 12, and 15 inch.

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* + 1. Green Drains: For green roof applications.
       1. Product: R1100-28-G8H Green Drain. 8 inches dia. cast stainless steel A1 body. No hub bottom outlet connection, stainless steel membrane clamp. 8 inch high secured stainless steel ballast guard and removable perforated lid with lift handle.
          1. Pipe Sizes: 2, 3, and 4 inch.
       2. Product: R1100-28-G8H-AI Green Drain. 8 inches dia. cast stainless steel A1 body. No hub bottom outlet connection, stainless steel membrane clamp. 8 inch high secured stainless steel ballast guard with auxiliary inlet and removable perforated lid with lift handle. Pipe Sizes: 2, 3, and 4 inch.
       3. Product: R1200-JD-G18H-W31P-16.5L Green Drain. Perforated stainless steel ballast guard prevents vines from entering drain line. Lacquered cast iron large planting area drain. Anchor flange. Cast iron clamp ring water proofing membrane. Ballast Guard: Extended perforated stainless steel with solid secured cover and internal perforated standpipe. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       4. Product: R1200-JD-M-G5H- Green Drain. Perforated stainless steel ballast guard prevents vines from entering the drain line. Lacquered cast iron large planting area drain. Anchor flange. Cast iron clamp ring for water proofing membrane. Ballast Guard: Extended perforated stainless steel with a solid secured cover and internal perforated standpipe. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       5. Product: R1200-JD-M-G5H-W31H4 - Green Drain. Ballast Guard: Perforated stainless steel with secured cover, prevents vines from entering drain line. Lacquered cast iron large planting area drain. Anchor flange. Cast Iron clamp ring for water proofing membrane. Dome: Cast iron with PVC standpipe.
          1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       6. Product: R1200-JD-M-G8H-AI - Green Drain. Ballast Guard: Ballast Guard: Perforated stainless steel prevents vines from entering drain line. Auxiliary inlet and lifting handle. Lacquered cast iron large planting area drain. Anchor flange. Cast iron clamp ring for water proofing membrane. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       7. Product: R1200-JD-W30 - Green Drain. 15 inches dia. lacquered cast iron A8 body. Combination membrane clamp and gravel guard. Low silhouette cast iron, stainless steel mesh covered dome and top PVC cap. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       8. Product: R1200-JD-W31P24L-R1104 - Green Drain. 15 inches dia. lacquered cast iron A8 body. Combination membrane clamp and gravel guard. Low silhouette cast iron, stainless steel mesh covered dome. 24 inch high perforated PVC standpipe with cast iron body and poly dome strainer on top. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       9. Product: R1200-JD-W31P24L-R1204-JD - Green Drain. Ballast Guard: Perforated stainless steel prevents vines from entering drain line. Lacquered cast iron drain with anchor flange. Cast iron clamp ring for water proofing membrane. Cast iron dome with stainless steel mesh. Perforated PVC standpipe Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       10. Product: 1200-JD-W31P24L-R1404T-1-83 - Green Drain. Ballast Guard: Perforated stainless steel prevents vines from entering drain line. Lacquered cast iron drain with anchor flange, nickel bronze strainer, and stainless steel mesh. Cast iron clamp ring for water proofing membrane. Cast iron dome with stainless steel mesh. Perforated PVC standpipe. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       11. Product: R1200-JD-W31P24L-R1444 - Green Drain. Ballast Guard: Perforated stainless steel prevents vines from entering drain line. Lacquered cast iron drain with anchor flange and ductile iron grate assembly. Cast iron clamp ring water proofing membrane. Cast iron dome with stainless steel mesh. Perforated PVC standpipe. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       12. Product: R1200-JD-W31P6L-WD - Green Drain. Ballast Guard: Perforated stainless steel prevents vines from entering drain line. Lacquered cast iron drain with anchor flange. Cast iron clamp ring water proofing membrane. Cast iron dome with stainless steel mesh . Perforated PVC standpipe with lacquered cast iron dome. Pipe Sizes: 2, 3, 4, 5, and 6 inch.

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* + 1. HYDROMAX:
       1. Product: MH-200 Siphonic Terrace Roof Drain. Used in terraces and/or balconies. Part of a siphonic roof drainage system where foot traffic exists. Type 304 stainless steel, no hub outlet connection, anchor flange, waterproofing membrane clamp ring and air baffle / inducer with stainless steel allen key hardware. Pipe Size: 2 inch.
       2. Product: MH-205-G and MH-305-G Siphonic Gutter Roof Drain. Used in Gutter siphonic roof drain system. Stainless steel wide anchor flange, air baffle / inducer, with stainless steel allen key hardware. Pipe Sizes: 2 and 3 inch.
       3. Product: MH-300, 400, 500, 600 Siphonic Primary Roof Drain. Used in any type of roof. Lacquered cast iron with wide anchor flange, waterproofing membrane clamp ring, ductile iron air baffle / inducer. Stainless steel allen key hardware. Pipe Sizes: 3, 4, 5, and 6 inch.
       4. Product: MH-301-DG, 401, 501, 601 Siphonic Overflow Roof Drain with Debris Guard. Used in any type of roof. Accept water once main siphonic roof drain is clogged or overwhelmed. Lacquered cast iron with wide anchor flange, waterproofing membrane clamp ring. Integral 2 inch water dam. Ductile iron air baffle / inducer. Stainless steel allen key hardware, and debris guard. Pipe Sizes: 3, 4, 5, and 6 inch.
       5. Product: MH-301, 401, 501, 601 Siphonic Overflow Roof Drain. Used in any type of roof. Accepts water once the main siphonic roof drain is clogged or overwhelmed. Lacquered cast iron with wide anchor flange, waterproofing membrane clamp ring with integral 2 inch water dam. Ductile iron air baffle / inducer. Stainless steel allen key hardware. Pipe Sizes: 3, 4, 5, and 6 inch.
       6. Product: MH-500-28 Siphonic Gutter Roof Drain. Used in any type of roof. Wide anchor flange. Ductile iron air baffle / inducer. Stainless steel allen key hardware. Pipe Size: 5 inch.
       7. Product: MH-501-28 Siphonic Gutter Overflow Roof Drain: Used in any type of roofs. Accepts water once the main siphonic roof drain is clogged or overwhelmed. Stainless steel with small anchor flange for gutter installation. Ductile iron air baffle / inducer. Stainless steel allen key hardware. Pipe Size: 5 inch.
       8. Product: MH-300, 400, 500, 600-BP Siphonic Bearing Pan. Used in any type of roof. Lacquered cast iron.
       9. Product: MH-F1460 Siphonic to Gravity Break Area Drain Used in warehouses, mechanical rooms, parking garages and non-membrane finished areas. 16 inch square, 1 inch thick, adjustable tractor grate fort use with all types of poured finished floors. Lacquered cast iron with anchor flange, weepholes, and adjustable collar. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       10. Product: MH-F1580 Heavy Duty Deep Sump Siphonic to Gravity Break Area Drain: Used in industrial factories, mechanical rooms, parking garages, and membrane finished areas. Heavy duty 24 inch square two section ductile iron tractor grate. Free area of 200 sq inches. Grates to have maximum 13/16 inch openings. Powder epoxy coated with secondary dome strainer, bottom outlet. Pipe sizes: 8, 10, and 12 inches.
       11. Product: MH-PG-D Siphonic Parking Garage/Deck Drain Sump Receiver: For installation on Parking Garage/Deck with standard MH-300/400/500 and MH-301/401/501 siphonic roof drain where automotive traffic exists. Fabricated steel with ductile iron grate.
       12. Product: MH-T Heavy Duty Deep Sump Siphonic to T2000 Trench Drain: For industrial factories, mechanical rooms, parking garages and other membrane finished areas. 24 inch square two section ductile iron tractor grate. Connects to trench drain. Free area of 200 sq inches. Powder epoxy coated Grates to have a maximum 13/16 inch openings. Pipe Sizes: 3, 4, 5, and 6 inch.
       13. Product: MH-UDC Siphonic Underdeck Clamp: On any type of roof. Lacquered cast iron. Pipe Sizes: 3, 4, 5, and 6 inch.
       14. Product: MH-WDEXT-2IN Siphonic Overflow Extension. Extends height of water dam by 2 inches. Can add on 1 inch increments as needed. Lacquered cast iron siphonic roof drain overflow extension with stainless steel allen key hardware.

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* + 1. Other Roof Drains:
       1. Product: 1640 Parapet Scupper Sleeve. Lacquered cast iron body. Fixed combination flashing flange and membrane clamp, and adjustable parapet wall flange. Used in roofs to drain rainwater through parapet walls. Pipe Size: 4 inch.
       2. Product: R1810 Universal Membrane Clamp and Dome Receiver. Lacquered cast iron. For retrofit roof applications where existing roof drain body continues to be used. Works with large sump MIFAB roof drain bodies using HS-18 hardware set. Accept MIFAB's A2-PD and A2-MDL-80 large dome strainers.
          1. Bolts to roof drain bodies from: Josam, J.R. Smith, Wade, Watts and Zurn. Use HS-19 hardware set.
       3. Product: R1850 Vent Stack Flashing Sleeve: Lacquered cast iron sleeve with membrane clamp. Used as a counter flashing sleeve where roofing membranes are terminated at the vent stack protruding through the roof. Pipe Sizes: 1-1/2, 2, 3, 4, 5, 6, 8, 10, and 12 inch.
       4. Product: R1900 Vertical Expansion Joint: Neoprene vertical expansion joint with stainless steel no hub clamps. Used to reduce expansion and contraction movements in vertical leaders, pipes, stacks and vents or soil lines to prevent damage to this material and to the building. Pipe Sizes: 2, 3, 4, 6, and 8 inch.
       5. Product: R1930 Vandal Proof Cast Iron Vent Cap. Lacquered cast iron body and dome secured to body with an allen key screw. Used with all plumbing vents that terminate above the roof. Vandal proof dome prevents debris from entering vent opening. Pipe Sizes: 2, 3, 4, and 6 inch.

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* + 1. RoofGuard:
       1. Product: R1200-R-RG Large Sump Drain with Water Dam. For flat roofs where constant height of water is required. Also used as emergency overflow, draining water when depth of water on the roof exceeds the water dam height. Lacquered cast iron with 15 inches dia. anchor flange, 2 inch high combined water dam / waterproofing membrane clamp ring, and 12.25 inch dia. cast iron RoofGuard dome strainer with horizontal and perimeter drainage slots. Patented design increases surface area making drain virtually uncloggable. Eliminates leaks and standing water. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       2. Product: R1200-RG Large Sump Roof Drain. For any type of roofs. Lacquered cast iron with 15 inches dia. anchor flange, waterproofing membrane clamp ring with integral gravel stop. 12.25 inch dia. cast iron RoofGuard dome strainer with horizontal and perimeter drainage slots to prevent clogging of roof dome. Patented design increases surface area making drain virtually uncloggable. Eliminates leaks and standing water. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       3. Product: R1270-RG Combined Large Sump Roof Drain and Secondary Overflow System. Used on conventional or flat roofs when a safety overflow is needed. Receives water when accumulation is greater than the 2 inch water dam height and is required to be located beside the primary roof drain. Galvanized steel sump receiver, 24 x 46 inch. Two lacquered cast iron bodies with 15 inches dia. anchor flange. One cast iron waterproofing membrane clamp ring with integral gravel stop, and a second 2 inch high, cast iron external combined water dam and waterproofing membrane clamp ring. Two 12.25 inches dia. cast iron dome strainers with horizontal and perimeter drainage slots to prevent clogging of roof domes. Patented design increases surface area making drain virtually uncloggable. Increased surface area and perimeter drainage eliminates leaks and standing water. Roof drain bodies bolt to underside of sump receiver. Three 5/16 inch x 3/4 inch long bolts and washers secure drains to the underside of sump receiver. Underdeck clamp rings are not required.
       4. Product: RG2016DD Polyethylene Replacement Roof Dome. UV inhibitor. 19 inches dia., horizontal slotted, free area drainage. 10 year limited warranty.
       5. Product: RG2016DDC Cast Iron replacement Roof Dome. 12.25 inch dia., 3 inch high, horizontal slotted, free area drainage design. 10 year limited warranty.
       6. Product: RG2016DG Polyethylene Replacement Roof Scupper Drain. UV inhibitor. Extra-large, horizontal slotted, free area drainage design. 10 year limited warranty.
       7. Product: RG2016DGC Cast Iron Roof Scupper. Extra-large, horizontal slotted, free area drainage design. 10 year limited warranty.

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* + 1. Scuppers: For roof drainage where roof and parapet meet.
       1. Product: R1300T Scupper Drain with Angle Grate and Threaded Outlet. Sloped grate prevents debris from blocking drainage openings. Lacquered cast iron with 90 degree threaded outlet and membrane clamp. Sloped Grate: Cast iron or nickel bronze.
          1. Pipe Sizes: 2, 3, 4, 6, and 8 inch.
       2. Product: R1310 Scupper Drain with Angle Grate and No Hub Outlet. Angled grate prevents debris from blocking drainage openings. Lacquered cast iron with 45 degree no hub outlet and membrane clamp. Sloped Grate: Cast iron or nickel bronze.
          1. Pipe Sizes: 2, 3, 4, 6, and 8 inch.
       3. Product: R1320T Scupper Drain with Flat Grate and Threaded Outlet. Grate prevents obstruction to traffic. Lacquered cast iron scupper drain with 90 degree threaded outlet and membrane clamp. Flush 90 Degree Grate: Cast iron or nickel bronze.
          1. Pipe Sizes: 2, 3, 4, 6, and 8 inch.
       4. Product: R1330 Scupper Drain with Flat Grate and No Hub Outlet. Flush grate prevents obstruction to traffic. Lacquered cast iron scupper drain with 45 degree no hub outlet, and membrane clamp. Flush 90 Degree Grate: Cast iron or nickel bronze.
          1. Pipe Sizes: 2, 3, 4, 6, and 8 inch.

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Sump Roof Drains:
       1. Product: R1100 Standard Sump Roof Drain. For flat roofs and gutters. Ideal for limited space applications. 8 inches dia., lacquered cast iron drain, anchor flange, waterproofing membrane clamp ring with tongue in groove design, integral gravel stop, and self-locking polyethylene dome strainer with free area of 43 square inches preventing debris from entering drain.
          1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       2. Product: R1100-90 Small Sump Roof Drain with Side Outlet. For flat roofs and gutters. Ideal for limited space applications. 8 inches dia., lacquered cast iron drain with threaded side outlet, anchor flange, cast iron waterproofing membrane clamp ring, integral gravel stop, and self-locking polyethylene dome strainer with free area of 43 square inches preventing debris from entering drain.
          1. Pipe Sizes: 2, 3, and 4 inch.
       3. Product: R1100-EU Small Sump Roof Drain for Insulated Roof Deck. For flat roofs and gutters. Ideal for limited space applications. 8 inches dia. lacquered cast iron drain with anchor flange, cast iron waterproofing membrane clamp ring, integral gravel stop, adjustable cast iron extension flange, underdeck clamp. and self-locking polyethylene dome strainer with free area of 43 square inches preventing debris from entering drain. Adjustable Extension System: Adjusts to thickness of insulation on top of roof deck without the need for gaskets. Body is elevated off the roof deck eliminating need for bearing pan or sump receiver.
          1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       4. Product: R1100-F Small Sump Roof Drain with Parabolic Weir. For flat roofs and gutters to control rainwater flow off of the roof. Ideal for limited space applications. 8 inches dia. lacquered cast iron drain, anchor flange, cast iron waterproofing membrane clamp ring, integral gravel stop, Accuflow parabolic weir; one, two or three slots, and self-locking polyethylene dome strainer with free area of 43 square inches preventing debris from entering drain. Flow performance per weir is 5 gpm per inch of water per slot. Dome provides rainwater drainage rainwater and prevents debris from entering drain.
          1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       5. Product: R1100-G Small Sump Roof Drain Ballast Guard for flat IRMA Roofs. Ideal for applications with limited space. 8 inches dia. lacquered cast iron body, anchor flange, waterproofing membrane clamp ring, integral gravel stop, ballast guard, ballast guard, and self-locking dome strainer. Ballast Guard: 6 inch high stainless steel with 1/2 inch dia. holes allowing drainage without clogging. Dome Strainer: Polyethylene. 43 square inches of free area. For drainage of rainwater preventing debris from entering drain.
          1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       6. Product: R1100-JC Small Sump Roof Drain Stainless Steel Ballast Guard for IRMA Roofs. Ideal for applications with limited space. 8 inches dia. lacquered cast iron body, anchor flange, waterproofing membrane clamp ring, integral gravel stop, ballast guard, and self-locking dome strainer. Ballast Guard: 6 inch high stainless steel with 1/2 inch dia. holes allowing drainage without clogging Dome Strainer: Polyethylene. 43 square inches of free area. For drainage of rainwater preventing debris from entering drain.
          1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       7. Product: R1100-PJ Small Promenade Deck Drain with Stainless Steel Ballast Guard. For flat roofs and decks; promenade or recreational areas. Lacquered cast iron drain, extra wide anchor flange water proofing membrane clamp ring, stainless steel perforated extension, and 1 inch thick, 8 inch square adjustable ductile iron tractor grate. Grate blends in with tile and brick patterns and has enough free area for efficient rainwater drainage. 3/8 inch drainage slots prevent debris from entering drain.
       8. Product: R1100-PR Small Promenade Deck Drain. Function: For flat roofs and gutters, promenade, and recreational areas. Ideal for applications with limited space. Lacquered cast iron roof drain, anchor flange, waterproofing membrane clamp ring, and 8 inch square, 1 inch thick adjustable ductile iron tractor grate. Grate has 3/8 inch width drainage slots and free area of 26 square inches for efficient rainwater drainage while preventing debris from entering drain.
       9. Product: R1100-RS Small Sump Roof Deck Condensate Receptor Drain. For flat roofs and gutters. Receives condensate and wastewater from air conditioners, cooling towers and mechanical equipment. Ideal for limited space applications. 8 inch body dia. lacquered cast iron drain, anchor flange, cast iron waterproofing membrane clamp ring, integral gravel stop, overflow Dam, and dome strainer. Overflow Dam: 2 inches high prevents storm water from entering drain line. Dome Strainer: Prevents debris from entering drain.
          1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       10. Product: R1150 Combined Small Sump Roof Drain and Secondary Overflow System.For conventional or flat roofs where a safety overflow, which receives water only when the accumulation is greater than the height of the standpipe is required to be located beside a standard roof drain. One piece lacquered cast iron drain body with integral sump receiver. Cast iron waterproofing membrane clamp rings with integral gravel stops. One 2-1/2 inch high integral cast iron overflow standpipe and two self-locking metal dome strainers with a free area of 43 square inches each. Standpipe: Adjustable to attain desired overflow water depth. Dome: Provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, and 4 inch.
       11. Product: R1150-SPEC Combined Small Sump Roof and Secondary Overflow System with Loose Set Sump Receiver. For conventional or flat roofs where safety overflow, which receives water only when accumulation is greater than height of standpipe is required to be located beside a standard drain. Two lacquered cast iron roof drain bodies, anchor flanges, cast iron waterproofing membrane clamp rings, and integral gravel stops, one 4 inches dia. adjustable ABS overflow standpipe, two self-locking metal dome strainers with free area of 43 sq inches each. Standpipe: Adjustable to desired overflow water depth. Dome: Provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, and 4 inch.
       12. Product: R1200 Large Sump Roof Drain. For any type of roofs. Lacquered cast iron with 15 inches dia. anchor flange, cast iron membrane clamp ring, integral gravel stop, and self-locking polyethylene dome strainer with free area of 125 square inches. Strainer provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       13. Product: R1200-90 Large Sump Roof Drain with Side Outlet. For any type of roof. Lacquered cast iron drain with threaded side outlet, 15 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, and self-locking polyethylene dome strainer with 125 square inches free area Strainer provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, and 4 inch.
       14. Product: R1200-BUV Large Sump Roof Drain with Fixed Extension, Sump Receiver and Deck Clamp. For any type of flat roofs. Lacquered cast iron drain, 15 inches dia. anchor flange, sump receiver, gasketed fixed extension; 2, 3 or 4 inches high, underdeck clamp, waterproofing membrane clamp ring, integral gravel stop, and self-locking polyethylene dome strainer with 125 square inches free area. Dome provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       15. Product: R1200-F Large Sump Flow Controlled Roof Drain with Parabolic Weir. Used to control the volume of rainwater draining off the roof. Lacquered cast iron drain, anchor large, waterproofing membrane clamp ring, integral gravel stop, self-locking polyethylene dome strainer with 125 square inches free area and parabolic weir; one, two or three slots. Slots reduce volume of water to the leader. Flow performance per weir is 10 GPM per inch of water per slot.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       16. Product: R1200-G Large IRMA Sump Roof Drain with Stainless Steel Ballast Guard, For IRMA roofs. Lacquered cast iron deep sump roof drain,15 inch dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, 6 inch high stainless steel ballast guard with 1/2 inch round drainage openings. Self-locking polyethylene dome strainer with 125 square inches free area. Dome provides drainage of rainwater and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       17. Product: R1200-HC Large Sump Roof Drain with Adjustable Ballast Guard for IRMA Roofs Lacquered cast iron drain, 15 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, adjustable ballast guard with drainage slots, secondary clamp, and self-locking polyethylene dome strainer with 125 square inches free area. Adjustability: 1-1/2 inch range relative to insulation thickness. Dome provides for rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       18. Product: R1200-JC Large Sump Roof Drain with Stainless Steel 6 inches High Ballast Guard for IRMA Roofs. Lacquered cast iron drain. 15 inch dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, ballast guard with 1/2 inch round drainage openings and self-locking polyethylene dome strainer 125 square inches free area. Dome provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       19. Product: R1200-JD Large Sump Replacement Roof Drain. For any type of flat roof to replacing existing Josam, Smith, Wade or Zurn large sump roof drain. Lacquered cast iron sump, 15 inches dia. anchor flange, waterproofing membrane clamp ring with four bolt pattern, integral gravel stop, and self-locking cast iron dome strainer with 103 square inches free area. Dome provides drainage of rainwater and prevents debris from entering drain.
           1. Pipe Sizes: 3, 4, and 6 inch.
       20. Product: R1200-JD-STR Large Sump Roof Drain with Extension Hardware and Sump Pan- New or Replacement. A roof drainage system with extension range of 3/4 to 8 inches, accommodating insulation heights. Slots around base of sump pan permit installer to secure system to top of deck. Lacquered cast iron drain. 15 inches dia. anchor flange, waterproofing membrane clamp ring with four bolt pattern, integral gravel stop, and self-locking cast iron dome strainer with 103 square inches free area. Lacquered 18 gauge 30 inch square sump pan and HS-8 hardware.
           1. Pipe Sizes: 3, 4, and 6 inch.
       21. Product: R1200-PR Large Promenade Deck Drain with 12 inch Tractor Grate. For flat roofs and decks; promenade or recreational areas. Lacquered cast iron drain, 15 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, square adjustable collar and 12 inch square hinged ductile iron tractor grate. Grate blends with tile and brick patterns with 51 square inches free area for drainage of rainwater. 3/8 inch wide slots prevent debris from entering drain. Double adjustable extension adjusting the extension independent of the top assembly to the required height and position. Permits alignment of square drain with square tile or brick pattern.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       22. Product: R1200-PR15 Large Promenade Deck Drain with 15 inch Square Tractor Grate. For flat roofs and decks; promenade or recreational areas. Lacquered cast iron drain, 15 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, square adjustable collar and 15 inch square hinged ductile iron tractor grate. Grate blends with tile and brick patterns with 51 square inches free area for drainage of rainwater. 3/8 inch wide slots prevent debris from entering drain. Double adjustable extension adjusting the extension independent of the top assembly to the required height and position. Permits alignment of square drain with square tile or brick pattern.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       23. Product: R1200-R Large Sump Roof Drain with External 2 inch Water Dam. For flat roofs where constant water height is required. Also used as emergency overflow, draining water when roof water depth exceeds the water dam height. Lacquered cast iron drain, 15 inches dia. anchor flange, 2 inch high cast iron external combined water dam and waterproofing membrane clamp ring, and self-locking polyethylene dome strainer with 125 square inches free area. Dome provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       24. Product: R1200-RS Large Sump Roof Deck Condensate Receptor Drain. For flat roofs to receive condensate and wastewater from air conditioners, cooling towers and other mechanical equipment. Lacquered cast iron drain, 15 inches dia. anchor flange, 2 inch high cast iron external combined water dam and waterproofing membrane clamp ring, and internal dome strainer. External dam prevents storm water from entering drain. Internal dome strainer prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       25. Product: R1200-SO Large Sump Dual Outlet Drain. For flat roofs. Lacquered fabricated drain, No Hub side and bottom outlet, 15 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, and self-locking low profile aluminum dome strainer. Dome provides drainage of rainwater and prevents debris from entering drain.
           1. Pipe Sizes: 3, 4, and 6 inch.
       26. Product: R1200-W Large Sump Roof Drain with Adjustable Internal Standpipe Dam. For flat roofs where a constant height of water is required. Also used as safety overflow on conventional roofs, draining water when water depth on roof exceeds standpipe height. Lacquered cast iron drain, 15 inches dia. anchor flange, waterproofing membrane clamp ring with integral gravel stop, adjustable internal standpipe dam, and self-locking polyethylene dome strainer with 125 square inches free area. Standpipe dam can be cut to required water depth. Dome provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       27. Product: R1200-Z Large Sump Dexotex Roof Drain with Wide Deck Flange for a Liquid Membrane Roof. For flat roofs and decks for promenade or recreational areas where traffic bearing roof deck covering is used. Lacquered cast iron drain, 20 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, and self-locking polyethylene dome strainer with 125 square inches free area. Dome provides drainage of rainwater and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, 6, and 8 inch.
       28. Product: R1220 Medium Sump Roof Drain For any type of flat roof. Lacquered cast iron drain with 12 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, and self-locking cast iron dome strainer with 71.50 square inches free area.
           1. Pipe Sizes: 2, 3, 4, and 6 inch.
       29. Product: R1220-EU Medium Sump Extension Roof Drain. For 1-3/4 to 7 inch Insulation. For any type of flat roofs. Lacquered cast iron drain, 12 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, adjustable extension flange, underdeck clamp and self-locking cast iron dome strainer with 71.50 square inches free area. Adjustable Extension System: Adjusts to thickness of insulation on roof deck without the need for gaskets. Body is elevated off roof deck eliminating need for bearing pan or sump receiver.
           1. Pipe Sizes: 2, 3, 4, and 6 inch.
       30. Product: R1220-G .Medium Sump Roof Drain with Stainless Steel Ballast Guard for IRMA Roofs. For any type of flat roofs. Lacquered cast iron drain, 12 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, 5 inch high stainless steel ballast guard, and self-locking cast iron dome strainer with 71.50 square inches free area.
           1. Pipe Sizes: 2, 3, 4, and 6 inch.
       31. Product: R1220-JC Medium Sump Roof Drain with Stainless Steel 6" High Ballast Guard for IRMA Roofs. Lacquered cast iron medium sump roof drain, 12 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, 5 inch high stainless steel perforated ballast guard with 1/2 inch round drainage openings, and self-locking cast iron dome strainer 71.50 square inches free area. Dome provides for drainage of rainwater and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, and 6 inch.
       32. Product: R1220-PR Medium Promenade Deck Drain with 12 inch Tractor Grate. For flat roofs and decks, promenade, or recreational areas. Lacquered cast iron drain, 12 inches dia. anchor flange, square adjustable collar and 12 inch square hinged ductile iron tractor grate with 3/8 inch width drainage slots; 51 square inches free area. Tractor Grate blends in with tile and brick patterns and accommodates rainwater drainage. 3/8 inch drainage slots prevent debris from entering drain. If required, a double adjustable extension may be ordered to adjust extension independent of the top assembly to required height and position.
           1. Pipe Sizes: 2, 3, 4, and 6 inch.
       33. Product: R1220-R Medium Sump Drain with Integral 2 inch Water Dam. For flat roofs where constant water height is required. Also used as an emergency overflow, draining water when roof water depth exceeds water dam height. Lacquered cast iron drain, 12 inches dia. anchor flange, 2 inch high cast iron integral combined water dam and waterproofing membrane clamp ring, and self-locking cast iron dome strainer with 71.50 square inches free area. Dome provides rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, and 6 inch.
       34. Product: R1220-RS Medium Sump Roof Deck Condensate Receptor Drain. For flat roofs, Receives condensate and wastewater from air conditioners, cooling towers and other mechanical equipment. Lacquered cast iron drain, 12 inches dia. anchor flange, 2 inch high external combined water dam and waterproofing membrane clamp ring, and internal dome strainer. Dam prevents storm water from entering drain line and internal dome strainer prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, and 6 inch.
       35. Product: R1250 Extra Deep Sump High Flow Roof Drain. For flat roofs. Lacquered cast iron drain, 15 inches dia. anchor flange, large waterproofing membrane clamp ring, integral gravel stop, and self-locking polyethylene dome strainer with 125 square inches free area. Extra deep sump body and large free area dome provide high flow rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 2, 3, 4, 5, and 6 inch.
       36. Product: R1260 Extra Large Sump, High Flow Roof Drain. For flat roofs. Lacquered cast iron drain, 15 inches dia. anchor flange, waterproofing membrane clamp ring, integral gravel stop, and self-locking polyethylene dome strainer with 125 square inches free area. Function: sump body and dome provide high flow rainwater drainage and prevents debris from entering drain.
           1. Pipe Sizes: 10 and 12 inch.
       37. Product: R1270 Combined Large Sump Roof Drain with Secondary Overflow. For conventional or flat roofs. The safety overflow receives water when accumulation is greater than the standpipe and is to be located beside a standard roof drain. Galvanized 24 x 42 inch sump receiver, two lacquered cast iron drain bodies, 15 inches dia. anchor flange, waterproofing membrane clamp rings, integral gravel stop, one 4 inch ABS overflow standpipe and two self-locking polyethylene dome strainers with 250 square inches free area. Adjust standpipe, 2 to 4-1/2 inches, to attain desired overflow water depth. Domes provide drainage of rainwater and prevents debris from entering drain line. The roof drain bodies are bolted to underside of sump receiver and are fixed, eliminating an underdeck clamp ring. Hardware bolts, 5/16 x 3/4 inch, and washers secure drain bodies to the underside of the sum receiver.

\*\* NOTE TO SPECIFIER \*\* Delete article if not required.

* 1. TRENCH DRAINS

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Cast Iron Trench Drains: Infinite body sections can be assembled. For vehicle washdown areas, loading and parking areas, at bottom of parking garages, warehouses, and other locations that have heavy vehicle traffic.
       1. Product: T1320-FL 6 inch Wide, 6-3/4 inch Deep, 20 inch long Neutral Sloped Modular Cast Iron Body and Grate Trench Drain System.
          1. Trench Drain Body: Radiused bottom and flanged ends to connect to each other with a neoprene rubber gasket in between. 2 inch wide anchor flange cast into each side recessed 2.20 inches down from the top.
          2. End Outlets: Available in 2, 3 or 4 inch no hub connections.
          3. Bottom Outlets: Available in 2, 3, or 4 inch no hub outlet.
          4. Grate: 20 inch long, Class E, H-20 ductile iron, with hardware to secure grate to the body. Class A, B, C and D grates are available.
       2. Product: T1350-FL 12 inch Wide, 7 3/4 deep, 12 inch long , Neutral Sloped Modular Trench Drain and Grate System. Can be used in small sections as area drains.
          1. Trench Drain Body: Lacquered cast iron body. Radiused bottom and flanged ends connect to each other with neoprene rubber gaskets in between. 2 inch wide anchor flange cast into each side recessed 2 inches down from the top.
          2. End Outlets: Available in 2, 3, 4 or 6 inch no hub connections.
          3. Bottom Outlets: Available in 2, 3, 4 or 6 no hub connections.
          4. Grates: 12 inches long, Class E, H-20 ductile iron.

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Polymer Concrete Trench Drains: Interconnecting channels.
       1. Product: T1500-PB-3 MEA 4 inch Internal width, Polymer Concrete Trench Drain with Stainless Steel Integral Rails. For commercial, public and residential areas.
          1. Body: Polymer concrete. Interlocking ends, radiused bottom, and multiple anchoring ribs. 39.40 inches long, pre-sloped 0.5 percent or neutral.
          2. Heavy Duty, Stainless Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
          3. End and Bottom Outlets: 4 inch no hub outlet connections.
          4. Grates: Secured to body with Clipfix self-locking system.
          5. Lengths: 1 or 1/2 meters.

Material: Stainless Steel Perforated Grate. (Load Class A)

Material: Stainless Steel Slotted Grate. (Load Class A)

Material: Stainless Steel Mesh Grate. (Load Class A)

Material: Stainless Steel Longitudinal Grate. (Load Class B)

Material: Stainless Steel Perforated Grate. (Load Class C)

Material: Stainless Steel Slotted Grate. (Load Class C)

Material: Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Paverslot Grate. (Load Class C)

Material: Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Stainless Steel Slotted Grate. (Load Class E)

Material: Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1500-PB-13 MEA 4 inch Internal width, Polymer Concrete Trench Drain with Galvanized Steel Integral Rails. For commercial, public and residential areas.
         1. Body: Polymer concrete. Interlocking ends, radiused bottom, and multiple anchoring ribs. 39.40 inches long, pre-sloped 0.5 percent or neutral.
         2. Heavy Duty, Galvanized Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         3. End and Bottom Outlets: 4 inch no hub outlet connections.
         4. Grates: Secured to body with Clipfix self-locking system.
         5. Length: 1 or 1/2 meters.

Material: Galvanized Steel Perforated Grate. (Load Class A)

Material: Galvanized Steel Slotted Grate. (Load Class A)

Material: Galvanized Steel Mesh Grate. (Load Class A)

Material: Galvanized Steel Longitudinal Grate. (Load Class B)

Material: Galvanized Steel Perforated Grate. (Load Class C)

Material: Galvanized Steel Slotted Grate. (Load Class C)

Material: Galvanized Steel Mesh Grate. (Load Class C)

Material: Galvanized Steel Paverslot Grate. (Load Class C)

Material: Galvanized Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized Steel Slotted Grate. (Load Class E)

Material: Galvanized Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1700-PB-3 MEA 8 inch Internal width, Polymer Concrete Trench Drain with Stainless Steel Integral Rails. For commercial, public and residential areas.
         1. Body: Polymer concrete. Interlocking ends, radiused bottom, and multiple anchoring ribs. 39.40 inches long, pre-sloped 0.5 percent or neutral.
         2. Heavy Duty, Stainless Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         3. End and Bottom Outlets: 6 inch no hub outlet connections.
         4. Grates: Secured to body with Clipfix self-locking system.
         5. Length: 1 or 1/2 Meter.

Material: Stainless Steel Mesh Grate. (Load Class A)

Material: Stainless Steel Longitudinal Grate. (Load Class B)

Material: Stainless Steel Perforated Grate. (Load Class C)

Material: Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Bar Grate. (Load Class C)

Material: Stainless Steel Paverslot Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Stainless Steel Maintenance Unit Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1700-PB-13 MEA 8 inch Internal width, Polymer Concrete Trench Drain with Galvanized Steel Integral Rails. For commercial, public and residential areas.
         1. Body: Polymer concrete. Interlocking ends, radiused bottom, and multiple anchoring ribs. 39.40 inches long, pre-sloped 0.5 percent or neutral.
         2. Heavy Duty, Galvanized Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         3. End and Bottom Outlets: 6 inch no hub outlet connections.
         4. Grates: Secured to body with Clipfix self-locking system.
         5. Length: 1 or 1/2 Meter:

Material: Galvanized Steel Mesh Grate. (Load Class A)

Material: Galvanized Steel Longitudinal Grate. (Load Class B)

Material: Galvanized Steel Perforated Grate. (Load Class C)

Material: Galvanized Steel Mesh Grate. (Load Class C)

Material: Galvanized Steel Paverslot Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized Steel Maintenance Unit Paverslot Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Longitudinal Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1800-PB-3 MEA 12 inch Internal width, Polymer Concrete Trench Drain with Stainless Steel Integral Rails. For commercial, public and residential areas.
         1. Body: Polymer concrete. Interlocking ends, radiused bottom, and multiple anchoring ribs. 39.40 inches long, pre-sloped 0.5 percent or neutral.
         2. Heavy Duty, Stainless Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         3. End and Bottom Outlets: 8 inch no hub outlet connections.
         4. Grates: Secured to body with Clipfix self-locking system.
         5. Length: 1 or 1/2 Meter.

Material: Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Paverslot Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

* + - 1. Product: T1800-PB-13 MEA 12 inch Internal width, Polymer Concrete Trench Drain with Galvanized Steel Integral Rails. For commercial, public and residential areas.
         1. Body: Polymer concrete. Interlocking ends, radiused bottom, and multiple anchoring ribs. 39.40 inches long, pre-sloped 0.5 percent or neutral.
         2. Heavy Duty, Galvanized Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         3. End and Bottom Outlets: 8 inch no hub outlet connections.
         4. Grates: Secured to body with Clipfix self-locking system.
         5. Length: 1 or 1/2 Meter:

Material: Galvanized Steel Mesh Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

* + - 1. Product: T1560-PB-3 MEA Shallow, 4 inch Internal width, Polymer Concrete Trench Drain with Stainless Steel Integral Rails. Non-sloping Trench Drain System. For commercial public and residential area.
         1. Size (WxLxD): 6 x 39.37 x 3.1 inches.
         2. Body: Polymer concrete. Interlocking ends and a flat bottom. Concrete composition results in a monolithic concrete installation.
         3. Integral extra heavy duty stainless steel rail: 0.16 inches. Allows heavy duty, hard wheel traffic applications.
         4. Bottom Outlets: 4 inch no hub outlet connections.
         5. Grates: Secured to body with Clipfix self-locking system.
         6. Length: 1 or 1/2 Meter:

Material: Stainless Steel Perforated Grate. (Load Class A)

Material: Stainless Steel Slotted Grate. (Load Class A)

Material: Stainless Steel Mesh Grate. (Load Class A)

Material: Stainless Steel Longitudinal Grate. (Load Class B)

Material: Stainless Steel Perforated Grate. (Load Class C)

Material: Stainless Steel Slotted Grate. (Load Class C)

Material: Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Paverslot Grate. (Load Class C)

Material: Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Stainless Steel Slotted Grate. (Load Class E)

Material: Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1560-PB-13 MEA Shallow, 4 inch Internal width, Polymer Concrete Trench Drain with Galvanized Steel Integral Rails. Non-sloping Trench Drain System. For commercial, public and residential area. Neutral Trench Drain System.
         1. Size (WxLxD): 6 x 39.37. 3.1 inches.
         2. Body: Polymer concrete. Interlocking ends and a flat bottom. Concrete composition results in a monolithic concrete installation.
         3. Integral heavy duty galvanized steel rail: 0.16 inches. Allows heavy duty, hard wheel traffic applications.
         4. Bottom Outlets: 4 inch no hub outlet connections.
         5. Grates: Secured to body with Clipfix self-locking system.
         6. Length: 1 or 1/2 Meter:

Material: Galvanized Steel Perforated Grate .(Load Class A)

Material: Galvanized Steel Slotted Grate. (Load Class A)

Material: Galvanized Steel Mesh Grate. (Load Class A)

Material: Galvanized Steel Longitudinal Grate. (Load Class B)

Material: Galvanized Steel Perforated Grate. (Load Class C)

Material: Galvanized Steel Slotted Grate. (Load Class C)

Material: Galvanized Steel Mesh Grate. (Load Class C)

Material: Galvanized Steel Paverslot Grate. (Load Class C)

Material: Galvanized Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized Steel Slotted Grate. (Load Class E)

Material: Galvanized Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1760-PB-3 MEA Shallow, 8 inch Internal width, Polymer Concrete Trench Drain with Galvanized Steel Integral Rails. Non-sloping Trench Drain System. For commercial public and residential area. Neutral Trench Drain System.
         1. Size (WxLxD): 8 x 39.37 3.9 inches.
         2. Body: Polymer concrete. Interlocking ends and a flat bottom. Concrete composition results in a monolithic concrete installation.
         3. Integral heavy duty stainless steel rail: 0.16 inches. Allows heavy duty, hard wheel traffic applications.
         4. Bottom Outlets: 4 inch no hub outlet connections.
         5. Grates: Secured to body with Clipfix self-locking system.
         6. Length: 1 or 1/2 meter.

Material: Stainless Steel Mesh Grate. (Load Class A)

Material: Stainless Steel Longitudinal Grate. (Load Class B)

Material: Stainless Steel Perforated Grate. (Load Class C)

Material: Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Bar Grate. (Load Class C)

Material: Stainless Steel Paverslot Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only .(Load Class C)

Material: Stainless Steel Maintenance Unit Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1760-PB-13 MEA Shallow, 8 inch Internal width, Polymer Concrete Trench Drain with Galvanized Steel Integral Rail. Non-sloping Trench Drain System. For commercial, public and residential areas. Neutral Trench Drain System.

Size (WxL): 8 x 39.37 3.9 inches deep.

Body: Polymer concrete. Interlocking ends and a flat bottom. Concrete composition results in a monolithic concrete installation.

Integral extra heavy duty galvanized steel rail: 0.16 inches. Allows heavy duty, hard wheel traffic applications.

Bottom Outlets: 4 inch no hub outlet connections.

Grates: Secured to body with Clipfix self-locking system.

* + - * 1. Length: 1 or 1/2 meter.

Material: Galvanized Steel Mesh Grate. (Load Class A)

Material: Galvanized Steel Longitudinal Grate. (Load Class B)

Material: Galvanized Steel Perforated Grate. (Load Class C)

Material: Galvanized Steel Mesh Grate. (Load Class C)

Material: Galvanized Steel Paverslot Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized Steel Maintenance Unit Paverslot Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Longitudinal Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

Material: Ductile Iron Longitudinal Grate. (Load Class F)

* + - 1. Product: T1500-CB620-3 MEA, 4 inch Internal width Polymer Concrete Catch Basin with Stainless steel integral rail. For commercial, public and residential areas.
         1. Catch Basin (WxLxD): 4 x 19.7 x 23.62 inch. Capable of receiving body sections. 4 or 6 inch No Hub side outlet.
         2. Body: Polymer concrete. Concrete composition results in monolithic concrete installation c/w Sediment Bucket.
         3. Heavy Duty, Stainless Steel Rails: Integral 0.08 inches thick. Allows hard wheel traffic applications.
         4. Grates: Ductile iron, galvanized steel, and Plastic grates c/w lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      2. Product: T1500-CB620-13 MEA, 4 inch Internal width Polymer Concrete Catch Basin with Galvanized steel integral rail. For commercial, public and residential areas.
         1. Catch Basin (WxLxD): 4 x 19.7 x 23.62 inch. Capable of receiving body sections. 4 or 6 inch No Hub side outlet.
         2. Body: Polymer concrete. Concrete composition results in monolithic concrete installation c/w Sediment Bucket.
         3. Heavy Duty, Galvanized Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         4. Grates: Ductile iron, Galvanized steel, Plastic and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      3. Product: T1700-CB820-3 MEA, 8 inch Internal width Polymer Concrete Catch Basin with Stainless steel integral rail. For commercial, public and residential areas.
         1. Catch Basin (WxL): 8 x 13.5 inches. Capable of receiving body sections. 6 or 8 inch No Hub side outlet.
         2. Body: Polymer concrete. Concrete composition results in monolithic concrete installation.
         3. Heavy Duty, Stainless Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         4. Grates: Ductile iron, Plastic, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      4. Product: T1700-CB820-13 MEA, 8 inch Internal width Polymer Concrete Catch Basin with Galvanized steel integral rail. For commercial, public and residential areas.
         1. Catch Basin (WxL): 8 x 13.5 inches. Capable of receiving body sections. 6 or 8 inch No Hub side outlet.
         2. Body: Polymer concrete. Concrete composition results in monolithic concrete installation.
         3. Heavy Duty, Galvanized Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         4. Grates: Ductile iron, galvanized steel, or Plastic and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      5. Product: T1800-CB1220-3 MEA, 12 inch Internal width Polymer Concrete Catch Basin with Stainless steel integral rail. For commercial, public and residential areas.
         1. Catch Basin (WxL): 12 x 13.5 inches. Capable of receiving body sections. 6 or 8 inch No Hub side outlet.
         2. Body: Polymer concrete. Concrete composition results in monolithic concrete installation.
         3. Heavy Duty, Stainless Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         4. Grates: Ductile iron, Plastic, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      6. Product: T1800-CB1220-13 MEA, 12 inch Internal width Polymer Concrete Catch Basin with Galvanized steel integral rail. For commercial, public and residential areas.
         1. Catch Basin (WxL): 12 x 13.5 inches. Capable of receiving body sections. 6 or 8 inch No Hub side outlet.
         2. Body: Polymer concrete. Concrete composition results in monolithic concrete installation.
         3. Heavy Duty, Galvanized Steel Rails: Integral 0.16 inches thick. Allows hard wheel traffic applications.
         4. Grates: Ductile iron, galvanized steel, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      7. Product: T1400-F 4 inch Wide Frame and Grate System. For Industrial, car washes, malls, parking lots, factories and other facilities requiring large areas of surface drainage.
         1. Angle Iron Frame: 1 x 5/8 x 1/8 inch angle. 20 inch long increments with standard 10ft sections. Each section has anchor tabs / leveling devices for securing into surrounding concrete. Finish: Acid resistant powder epoxy coating.
         2. Grates: Secured to body with Clipfix self-locking system.
         3. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class A)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class A)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class A)

Material: Galvanized or Stainless Steel Longitudinal Grate. (Load Class B)

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class C)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Galvanized or Stainless Steel Paverslot Grate. (Load Class C)

Material: Galvanized or Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate.(Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

* + - * 1. No body is provided as channel is formed into concrete by the installer.
      1. Product: T2000-F 8 inch Wide Frame and Grate System. For Industrial, car washes, malls, parking lots, factories and other facilities requiring large areas of surface drainage.
         1. Angle Iron Frame: 1 x 5/8 x 1/8 inch angle. 20 inch long increments with standard 10 ft long sections. Each section has anchor tabs / leveling devices for securing into surrounding concrete. Finish: Acid resistant powder epoxy coating.
         2. Grates: Secured to body with Clipfix self-locking system.
         3. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class A)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class A)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class A)

Material: Galvanized or Stainless Steel Longitudinal Grate. (Load Class B)

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class C)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Galvanized or Stainless Steel Paverslot Grate. (Load Class C)

Material: Galvanized or Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate.(Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Grate .(Load Class F)

* + - * 1. No body is provided as channel is formed into concrete by the installer.

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Plastic Trench Drains: An infinite number of body sections can be assembled.
       1. Product: T1400-PB 4 inch Internal width Trench Drain System. Interconnecting channel sections are made of high strength glass fiber reinforced polyester (GRP) and available in sloping (0.5 percent) and non-sloping (neutral) channels. Each channel comes with no edge rail.
          1. Body (WxL): Glass fiber reinforced polyester (GRP), 4 x 39.40 inch long, pre-sloped (0.5 percent) or neutral trench drain system. Each body has two installation devices supplied to suit up to No. 4 rebar. Interlocking ends, a radiused bottom, and staggered, semi-circular external profile on each side at the bottom enabling concrete flow underneath body.
          2. Accessories available include End caps, End outlets, Bottom Outlets and Catch basins:

\*\* NOTE TO SPECIFIER \*\* Delete grates options not required.

* + - * 1. Grates: Secured to body with Clipfix self-locking system.
        2. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class A)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class A)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class A)

Material: Galvanized or Stainless Steel Longitudinal Grate. (Load Class B)

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class C)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Galvanized or Stainless Steel Paverslot Grate. (Load Class C)

Material: Galvanized or Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Grate. (Load Class F)

* + - 1. Product: T1400-PB-13 4 inch Wide Trench Drain System. Interconnecting channel sections are made of high strength glass fiber reinforced polyester (GRP) and available in sloping (0.5%) and non-sloping (neutral) channels. Each channel comes with the standard galvanized steel integral edge rail which is monolithically embedded in the channel.
         1. Body (WxL): Glass fiber reinforced polyester (GRP), 4 x 39.40 inch long, pre-sloped (0.5 percent) or neutral trench drain system. Each body has two installation devices supplied to suit up to No. 4 rebar. 4 inch no hub outlet. Interlocking ends, a radiused bottom, and staggered, semi-circular external profile on each side at the bottom enabling concrete flow underneath body.
         2. Accessories available include End caps, End outlets, Bottom Outlets and Catch basins:

\*\* NOTE TO SPECIFIER \*\* Delete grates options not required.

* + - * 1. Grates: Secured to body with Clipfix self-locking system.
        2. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class A)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class A)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class A)

Material: Galvanized or Stainless Steel Longitudinal Grate. (Load Class B)

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class C)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Galvanized or Stainless Steel Paverslot Grate. (Load Class C)

Material: Galvanized or Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Plastic Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

.Material: Ductile Iron Slotted Grate. (Load Class F)

* + - 1. Product: T1400-CB620 4 x 20 x 18 inch Catch Basin. Used in line to maintain a visual appearance of a continuous trench drain. Catch Basins are made of high strength glass fiber reinforced polyester (GRP). Catch Basin comes with no edge rail and sediment bucket.
         1. Body (WxLxH): 4 x 20 x 18 inches. Catch Basin comes with no edge rail.
         2. End Outlets: 4 and 6 inch no hub outlets are part of the catch basin.
         3. Grates: Ductile iron, galvanized steel, Plastic, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      2. Product: T1400-CB620-13 4 x 20 x 18 inch Catch Basin. Used in line to maintain a visual appearance of a continuous trench drain. Catch Basins are made of high strength glass fiber reinforced polyester (GRP). Catch Basin comes with a standard galvanized steel integral edge rail which is monolithically embedded in the Catch Basin and sediment bucket.
         1. Body (WxLxH): 4 x 20 x 18 inches. and galvanized steel integral edge rail.
         2. End Outlets: 4 inches. no hub and are part of the catch basin.
         3. Grates: Ductile iron, galvanized steel, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      3. Product: T2000-PB 8 inch Internal width Trench Drain System. Interconnecting channel sections are made of high strength glass fiber reinforced polyester (GRP) and available in sloping (0.5 percent) and non-sloping (neutral) channels. Each channel comes with the standard no edge rail.
         1. Body (WxL): Glass fiber reinforced polyester (GRP): 8 x 39.40, pre-sloped (0.5 percent per body) or neutral trench drain system. Each body has two installation devices supplied to suit up to No. 4 rebar. End and bottom outlets: 6 inch no hub outlet.
         2. Water Resistant Sealant: Between sections for indoor installations.
         3. Angle Iron Frame: With each body sections for securing grates.
         4. Grates: Secured to body with Clipfix self-locking system.
         5. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class A)

Material: Galvanized or Stainless Steel Longitudinal Grate. (Load Class B)

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class C)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Bar Grate. (Load Class C)

Material: Galvanized or Stainless Steel Paverslot Grate. (Load Class C)

Material: Galvanized or Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

* + - 1. Product: T2000-PB-13 8 inch Internal width Trench Drain System. Interconnecting channel sections are made of high strength glass fiber reinforced polyester (GRP) and available in sloping (0.5%) and non-sloping (neutral) channels. Each channel comes with standard galvanized steel integral edge rail which is monolithically embedded in the channel.
         1. Body (WxL): Glass fiber reinforced polyester (GRP). 8 x 39.40, pre-sloped (0.5 percent per body) or neutral trench drain system. End and bottom outlets: 6 inch no hub outlet.
         2. Water Resistant Sealant: Between sections for indoor installations.
         3. Grates: Secured to body with Clipfix self-locking system.
         4. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class A)

Material: Galvanized or Stainless Steel Longitudinal Grate. (Load Class B)

Material: Galvanized or Stainless Steel Perforated Grate. (Load Class C)

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Bar Grate. (Load Class C)

Material: Galvanized or Stainless Steel Paverslot Grate. (Load Class C)

Material: Galvanized or Stainless Steel Maintenance Unit Paverslot Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Galvanized or Stainless Steel Slotted Grate. (Load Class E)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate. (Load Class E)

Material: Ductile Iron, Longitudinal Grate. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate. (Load Class E)

* + - 1. Product: T2000-CB820 8 x 20 inch Catch Basin. Used in line to maintain a visual appearance of a continuous trench drain. Catch Basins are made of high strength glass fiber reinforced polyester (GRP). Catch Basin comes with no edge rail and sediment bucket.
         1. Body (WxLxD): 8 x 20 x 20 inches. Glass fiber reinforced polyester catch basin (GRP) with no edge rail.
         2. Outlets: 6, and 8 inches no hub outlets are part of the catch basin.
         3. Grates: Ductile iron, galvanized steel, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      2. Product: T2000-CB820-13 8 x 20 inch Catch Basin. Used in line to maintain a visual appearance of a continuous trench drain. Catch Basins are made of high strength glass fiber reinforced polyester (GRP). Catch Basin comes with a standard galvanized steel integral edge rail which is monolithically embedded in the Catch Basin and sediment bucket.
         1. Body (WxLxD): 8 x 20 x 20 inches. Glass fiber reinforced polyester (GRP) catch basin with galvanized steel integral edge rail.
         2. End Outlets: 6, and 8 inches. no hub outlets are part of the catch basin.
         3. Grates: Ductile iron, galvanized steel, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      3. Product: T3000-PB 12 inch Wide Trench Drain System. For airports, car washes, malls, gas stations, parking lots, golf courses, and facilities requiring surface drainage. Interconnecting channel sections are made of high strength glass fiber reinforced polyester (GRP) and available in non-sloping (neutral) channels. Each channel comes with the standard no edge rail.
         1. Body (WxL):Glass fiber reinforced polyester (GRP). 12 x 39.40, neutral trench drain system. End and bottom outlets: 6, 8 and 10 inch no hub outlet.
         2. Water Resistant Sealant: Between sections for indoor installations.
         3. Grates: Secured to body with Clipfix self-locking system.
         4. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Bar Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate Half Meter Only. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class E)

Material: Ductile Iron, Longitudinal Grate Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate Half Meter Only. (Load Class E)

Material: Ductile Iron Solid Cover Half Meter Only. (Load Class E)

* + - 1. Product: T3000-PB-13, 12 inch Wide Trench Drain System. For airports, car washes, malls, gas stations, parking lots, golf courses, and facilities requiring surface drainage. Interconnecting channel sections are made of high strength glass fiber reinforced polyester (GRP) and available in non-sloping (neutral) channels. Each channel comes with the standard galvanized steel integral edge rail which is monolithically embedded in the channel.
         1. Body (WxL): Polypropylene. 12 x 39.40, Neutral trench drain system. End and bottom outlets: 6, 8 or 10 inch no hub outlet.
         2. Water Resistant Sealant: Between sections for indoor installations.
         3. Grates: Secured to body with Clipfix self-locking system.
         4. Length: 1 or 1/2 meter.

Material: Galvanized or Stainless Steel Mesh Grate. (Load Class C)

Material: Stainless Steel Bar Grate. (Load Class C)

Material: Ductile Iron Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Wave Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Bavaria Grate Half Meter Only. (Load Class C)

Material: Ductile Iron Slotted Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate Half Meter Only. (Load Class E)

Material: Ductile Iron Heelproof Slotted Grate Half Meter Only. (Load Class E)

Material: Ductile Iron, Longitudinal Grate Half Meter Only. (Load Class E)

Material: Galvanized Ductile Iron Slotted Grate Half Meter Only. (Load Class E)

Material: Ductile Iron Solid Cover Half Meter Only. (Load Class E)

* + - 1. Product: T3000-CB1220 12 x 20 x 34.5 inch Catch Basin. Used in line to maintain a visual appearance of a continuous trench drain. Catch Basins are made of high strength glass fiber reinforced polyester (GRP). Catch Basin comes with GRP edge rail and sediment bucket.
         1. Body (WxLxD): 12 x 20 x 34.5 inches. and GRP edge rail.
         2. End Outlets: 6 or 8 inches. no hub and are part of the catch basin.
         3. Grates: Ductile iron, galvanized steel, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.
      2. Product: T3000-CB1220-13 12 x 20 x 34.5 inch Catch Basin. Used in line to maintain a visual appearance of a continuous trench drain. Catch Basin are made of high strength Glass fiber reinforced polyester (GRP) and comes standard with a galvanized steel integral edge rail which is monolithically embedded in the Catch Basin and sediment bucket.
         1. Body (WxLxD): 12 x 20 x 34.5 inches. and galvanized steel integral edge rail.
         2. End Outlets: 6 or 8 inches. no hub and are part of the catch basin.
         3. Grates: Ductile iron, galvanized steel, or stainless steel and lockdown hardware. Available in Class A, B, C, D and E with ADA and FAA compliance.

\*\* NOTE TO SPECIFIER \*\* Delete Paragraph if not required or delete products not required.

* + 1. Steel/Stainless Steel
       1. Product: T1330 4 inch Internal width, Pre-sloped, Fabricated Steel Modular Trench Drain System.
          1. Body (WxL): 4 x 78.74 inch, pre-sloped (1/8 inch per foot). 16 gauge steel with acid resistant powder epoxy coating.
          2. Ends: Flanged. With neoprene rubber gasket in between flanges or welded. Anchor flange available
          3. End and Bottom Outlets: 3 or 4 no hub outlet fabricated as part of body.
          4. Grates: 20 inches long, Grates with lockdown hardware. Class A, B, C, D and E grates are available.
       2. Product: T5000-158 1-5/8 inch Wide, Aluminum Trench Drain Body and Grate. For pool, residential and landscaped areas requiring surface drainage in shallow 3-7/8 inch deep excavations.
          1. Body (WxDxL): 1-5/8 x 3-7/8 x 40 inch long, non-sloped, 14 gauge aluminum. 45 and 90 degree body sections are available.
          2. Anchor Flange: 1-1/2 inch on each side recessed 1-5/8 inch down from the top.
          3. Ends: Flanged with neoprene rubber gaskets.
          4. Grates: Aluminum and stainless steel supplied with lockdown hardware.
          5. End and Bottom Outlets: 2 inch no hub outlet connections fabricated as part of the body.
          6. Available with membrane clamps.
          7. Compatible with vapor barrier applications.
       3. Product: T5000-300 3 inch Wide, Aluminum Trench Drain Body and Grate. For pool, residential and landscaped areas requiring surface drainage in shallow 5-7/8 inch deep excavations.
          1. Body (WxDxL): 3 x 5-7/8 x 40 inch long, non-sloped, 14 gauge aluminum. 45 and 90 degree body sections are available.
          2. Anchor Flange: 1-1/2 inch on each side recessed 1-5/8 inch down from the top.
          3. Ends: Flanged with neoprene rubber gaskets.
          4. Grates: Aluminum and stainless steel supplied with lockdown hardware.
          5. End and Bottom Outlets: 2 inch no hub outlet connections fabricated as part of the body.
          6. Available with membrane clamps.

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until substrates have been properly constructed and prepared.
      2. If substrate preparation is the responsibility of another installer, notify Architect in writing of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
   3. INSTALLATION
      1. Install in accordance with manufacturer's instructions, approved submittals, and in proper relationship with adjacent construction.
   4. FIELD QUALITY CONTROL
      1. Field Inspection: Coordinate field inspection in accordance with appropriate sections in Division 01.

\*\* NOTE TO SPECIFIER \*\* Include if manufacturer provides field quality control with onsite personnel for instruction or supervision of product installation, application, erection, or construction. Delete if not required.

* + 1. Manufacturer's Services: Coordinate manufacturer's services in accordance with appropriate sections in Division 01.
  1. CLEANING AND PROTECTION
     1. Clean products in accordance with the manufacturer's recommendations.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION