SECTION 22 13 19.13

LINEAR DRAINS

Display hidden notes to specifier. (Don't know how? [Click Here](https://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* QD Holdings, LLC; linear drains.  
This section is based on the products of QD Holdings, LLC, which is located at:  
2597 W. 64th Ave.  
Denver, CO 80221  
Toll Free Tel: 866-998-6685  
Email: [request info (info@quickdrainusa.com)](https://arcat.com/rfi?action=email&company=QD%252BHoldings%252C%252BLLC&message=RE%253A%2520Spec%2520Question%2520(15155qdu)%253A%2520&coid=45795&spec=15155qdu&rep=&fax=)  
Web: <http://www.quickdrainusa.com>   
  
 [ [Click Here](https://arcat.com/company/qd-holdings-llc-45795) ] for additional information.  
  
QuickDrain USA is a premier manufacturer of stainless steel and PVC low-profile linear drain systems for showers and wet areas.  
  
All of the company's products are designed to meet Uniform Plumbing Code and International Plumbing Code standards and approvals. QuickDrain USA manufactures, warehouses and ships from Denver, CO. Corporate headquarters are in Frisco, CO. Josef Erlebach is VP of Technical Support, leading a team of technical specialists for both Commercial and Residential applications. The number of support staff continues to grow.  
  
Industry leaders have been quick to recognize and honor QuickDrain USA. In 2009 the company began to receive many prestigious awards: The Nightingale Award and best in overall at Healthcare Design '09 in Orlando, FL; Award of Excellence at Hospitality Design Expo in Las Vegas; Best of Competition and The Gold Awards at the KBIS Show and Conference in Atlanta, GA. Best Bath Product Award (International Builders Show 2014), Judge's Choice (K+BB 2014), Innovative Product Award (Architectural Magazine 2014). ADEX Gold Award (Design Journal 2015), A+ Popular Vote and Jury Award (Architizer 2015). Please see website for complete listing.  
  
QuickDrain is the only linear drain with the lowest profile, internally sloped trough, adjustable length and cover height to allow perfect installation necessary for barrier free and curbed shower installations.  
QuickDrain USA prides itself on offering unparalleled technical support from early design drawings by our engineers to on-site mock-up installations facilitated by our technicians.

1. GENERAL
   1. SECTION INCLUDES

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

* + 1. Low-profile linear shower drains at locations indicated on the Drawings.

\*\* NOTE TO SPECIFIER \*\* Proline stainless steel drain body linear shower drain. Delete if not required.

* + - 1. ProLine: Available stock or fully customizable, stainless steel drain body and trim.

\*\* NOTE TO SPECIFIER \*\* ShowerLine PVC drain body linear shower drain. Delete if not required.

* + - 1. ShowerLine: Low profile PVC linear drain body with stainless steel clamping collar and trim.

\*\* NOTE TO SPECIFIER \*\* horizontal wall outlet drain body linear shower drain. Delete if not required.

* + - 1. Wall Drain: Revolutionary linear drain design concealed in wall with no visible drain cover.

\*\* NOTE TO SPECIFIER \*\* RetrofitDrain "no recess" linear shower drain. Delete if not required.

* + - 1. Retrofit Drain: Ultra low profile (1/2 inch total install depth) drain for showers which doesn't require floor recess in curbless showers.
    1. Waterproofing membranes.
    2. Shower pan accessories.
  1. RELATED SECTIONS

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

* + 1. Section 03 30 00 - Cast-in-Place Concrete.
    2. Section 06 10 00 - Rough Carpentry.
    3. Section 09 30 00 - Tiling.
    4. Section 22 14 13 - Facility Storm Drainage Piping.
  1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ANSI A118.10 - Installation of Grout in Tilework.
    2. Tile Council of North America (TCNA) Handbook for Ceramic, Glass, and Stone Tile Installation.
  1. SUBMITTALS
     1. Submit under provisions of Section 01 30 00.
     2. Product Data: Manufacturer's data sheets on each product to be used, including:
        1. Preparation instructions and recommendations.
        2. Catalog information, component sizes, rough-in requirements, service sizes, and finishes.
        3. Storage and handling requirements and recommendations.
        4. Installation methods.
     3. Shop Drawings: Provide large scale shop drawings for installation of all parts of the work. Provide plans, elevations, and details of connections and accessory items. Provide installation templates for work installed by others. Show all interfaces and relationships to work of other trades.

\*\* NOTE TO SPECIFIER \*\* Note that verification samples may be supplied if the project size and/or quality warrants. Delete if not required.

* + 1. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color, and patterns.
    2. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
  1. QUALITY ASSURANCE
     1. Manufacturer Qualifications: Minimum 5 year experience manufacturing similar products.
     2. Installer Qualifications: Minimum 5 year experience installing similar products.
     3. Source Limitations for Materials and Accessories: Obtain product of a uniform quality for each application condition from a single manufacturer.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project 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: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
       1. Finish areas designated by Architect.
       2. Do not proceed with remaining work until workmanship is approved by Architect.
       3. Rebuild mock-up area as required to produce acceptable work.

\*\* NOTE TO SPECIFIER \*\* Include a preinstallation conference if the project size and/or quality warrant taking such a precaution. Delete if not required.

* + 1. Preinstallation Conference: Conduct conference at the Project site.
       1. Convene one week prior to commencing work of this section.
       2. Require attendance of installation material manufacturer, plumber, waterproofing installer, tile installer and installers of related work. Review installation procedures and coordination required with related work.
       3. Meeting agenda includes but is not limited to:
          1. Drain location and orientation.
          2. Prefabricated substrate requirements.
          3. Drainage membrane requirements.
          4. Tile and installation material compatibility.
          5. Edge protection, transition and pre-fabricated movement joint profiles.
          6. Waterproofing techniques.
          7. Crack isolation techniques.
  1. DELIVERY, STORAGE, AND HANDLING
     1. Store products in manufacturer's unopened packaging until ready for installation.
     2. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
     3. Store materials in a dry, warm, ventilated weathertight location.
     4. Handling: Handle materials to avoid damage.
  2. 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.
     2. Ceramic Tile: Tile installed adjacent to linear shower drains shall comply with ANSI A137.1, American National Standards Specifications for Ceramic Tile.
     3. Waterproof Membranes: Tile waterproofing shall comply with ANSI A118.10, Waterproof Membranes for Thin-set Ceramic Tile and. Dimension Stone Installations.
  3. SEQUENCING
     1. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.
  4. WARRANTY
     1. Warranty: Provide manufacturer's standard warranty for defects in materials or workmanship.
     2. When installed in accordance with manufacturer's specifications and in conjunction with local building codes, drains shall be warranted with a lifetime guarantee and warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturer: QD Holdings LLC, which is located at: 2597 W. 64th Ave.; Denver, CO 80221; ASD Toll Free Tel: 866-998-6685; Email: [request info](http://admin.arcat.com/users.pl?action=UserEmail&company=QuickDrain+USA&coid=45795&rep=&fax=&message=RE:%2520Spec%2520Question%2520(15155qdu):%2520%2520&mf=); Web: <https://www.quickdrainusa.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.
  1. LINEAR SHOWER DRAINS

\*\* NOTE TO SPECIFIER \*\* ProLine by QuickDrain USA is a linear drain that is unlike any other. All QuickDrain models are designed and manufactured without compromise in quality, functionality, or appearance. Incorporating internally sloped troughs, length & height adjustability, and assortment of designer covers in various finishes. Made in the USA. Delete if not required

* + 1. ProLine Series Linear Drains: Linear floor drain consisting of a formed and welded stainless steel channel body and cover that can be easily adjusted to tile or stone covering thicknesses from 1/8 inch (3 mm) to 1 inch (25 mm). Provide custom spacers if floor finish is greater than 1 inch (25 mm).
       1. Channel Body Material: Stainless steel 316 L.
       2. Channel Body Trough Width: 1 inch (25 mm).
       3. Outlet:

\*\* NOTE TO SPECIFIER \*\* Select required outlet size and configuration. Delete configurations not required.

* + - * 1. Vertical: 1-1/2 inches (38 mm).
        2. Vertical: 2 inches (51 mm).
        3. Horizontal (SWO): 1-1/2 inches (38 mm).
        4. Horizontal (SWO): 2 inches (51 mm).

\*\* NOTE TO SPECIFIER \*\* Available with custom outlet location, multiple waste outlets, and side waste outlets. Modify as required. Delete options not required.

* + - * 1. Custom Outlet Location: \_\_\_\_.
        2. Multiple Waste Outlets: \_\_\_\_.
        3. Side Waste Outlet: \_\_\_\_.
      1. Bonding Flange: For liquid waterproofing attachment.
         1. Width: 1 inch (25 mm).
      2. Cover Assembly: Includes spacers for height adjustment and cover.
      3. Drain Type: As referenced in methods B422 and B422 STONE in the TCNA Handbook.

\*\* NOTE TO SPECIFIER \*\* Resinous (epoxy) flooring model is available. Modify other attributes as required. Delete if not required.

* + - 1. Resinous flooring model.
      2. Drain capacity with single outlet is 10 GPM. Flow rate when used at the entry to a curb-less shower as a primary shower drain is 5 GPM per waste outlet.
      3. Channel Body and Cover Nominal Length:

\*\* NOTE TO SPECIFIER \*\* Select required length. Note that lengths shown do not include the width of the bonding flange. Please refer to the product data sheet to select the correct channel body length for your application. Multiple drains may be placed in-line to achieve longer lengths or runs. Consult with QuickDrain USA Technical Support. Delete lengths not required.

* + - * 1. PLD26N Length: 26 inches (660 mm).
        2. PLD27.5N Length: 27-1/2 inches (698 mm).
        3. PLD30N Length: 30 inches (762 mm).
        4. PLD33N Length: 33 inches (838 mm).
        5. PLD36N Length: 36 inches (914 mm).
        6. PLD40N Length: 40 inches (1016 mm).
        7. PLD44N Length: 44 inches (1118 mm).
        8. PLD46N Length: 46 inches (1168 mm).
        9. PLD48N Length: 48 inches (1219 mm).
        10. PLD52N Length: 52 inches (1321 mm).
        11. PLD57N Length: 57 inches (1448 mm).
        12. PLD63N Length: 63 inches (1600 mm).
        13. PLD68N Length: 68 inches (1727 mm).

\*\* NOTE TO SPECIFIER \*\* Custom lengths up to 100 inches are available. Modify as required.

* + - * 1. Custom Length: \_\_\_\_.
      1. Cover Design:

\*\* NOTE TO SPECIFIER \*\* Select required cover design. Note that the stainless steel pan for setting tile inserts can accommodate tile inserts only up to 3/8 inch thick. Delete cover designs not required.

* + - * 1. Vertical.
        2. Horizontal.
        3. Cosmo.
        4. TileIn.
        5. Lines.
        6. Stream.

\*\* NOTE TO SPECIFIER \*\* Select required size. Note that lengths can be trimmed to fit finished shower width. Multiple covers may be placed in line to achieve longer runs. Horizontal, Cosmo covers are available in custom lengths up to 120 inches. Delete sizes not required.

* + - * 1. Size: 32 inches (813 mm).
        2. Size: 40 inches (1016 mm).
        3. Size: 48 inches (1219 mm).
        4. Size: 56 inches (1422 mm).
        5. Size: 64 inches (1626 mm).
        6. Size: 72 inches (1829 mm).
        7. Multiple Covers to Achieve Total Size: \_\_\_\_.
      1. Drain Outlet Location:

\*\* NOTE TO SPECIFIER \*\* Select required drain outlet location. Models PLD26N, PLD27.5N, PLD33N, PLD46N, PLD63N, and PLD68N are center outlet only. Models PLD30N, PLD36N, PLD40N, PLD44N, PLD48N, PLD52N, and PLD57N are off-set outlet only (3 inches from center). If standard drain location is not suitable, specify custom location. Coordinate with QuickDrain USA Technical Support. If custom, specify location, size and type - vertical or side waste outlet. Delete drain outlet location not required.

* + - * 1. Location: Center.
        2. Location: Off-set.
        3. Location: Custom.

\*\* NOTE TO SPECIFIER \*\* QuickDrain is pleased to introduce the ShowerLine system, which features an injection molded PVC plastic drain body. ShowerLine is a VE solution to achieve a sleek high-end look. Available in six standard sizes and four outlet configurations, ShowerLine offers the same flexible linear drain solution for both new and retrofit applications. Delete if not required.

* + 1. ShowerLine Series Linear Drains: Linear floor drain consisting of an injection molded PVC channel body and stainless steel cover assembly that can be seamlessly adjusted for tile or stone covering thicknesses from 1/8 inch (3 mm) to 1 inch (25 mm).
       1. Channel Body Material: Schedule 40 PVC Plastic.
       2. Channel Body Trough Width: 1 inch (25 mm).

\*\* NOTE TO SPECIFIER \*\* Select required outlet size and orientation. Delete outlet size not required.

* + - 1. Outlet: 1-1/2 inches (38 mm).
         1. Vertical.
         2. Horizontal (SWO).
      2. Outlet: 2 inches (50 mm).
         1. Vertical.
         2. Horizontal (SWO).
      3. Bonding Flange: For topical liquid or sheet waterproofing attachment.
         1. Secured in place by clamping collar.
         2. Width: 1-1/4 inches (30 mm).
      4. Cover Assembly: Includes spacers for height adjustment and cover.
      5. Drain Type: As referenced in methods B422 and B422 STONE in the TCNA Handbook.
      6. Drain capacity for 2 inches (51 mm) outlet is 12 GPM in a shower pan with curb and 5 GPM in a shower pan without a curb at the entry. For 1.5 inches (38 mm) outlet: 9 GPM in a shower pan with curb and 3.5 GPM in a shower pan without a curb at the entry.
      7. Channel Body and Cover Nominal Length:

\*\* NOTE TO SPECIFIER \*\* Select required configuration and length. Note that lengths shown do not include the width of the bonding flange. Please refer to the product data sheet to select the correct channel body length for your application. Multiple drains may be placed in-line to achieve longer lengths or runs. Consult with QuickDrain USA Technical Support. Delete configuration and lengths not required.

* + - * 1. Vertical Outlet: PVC2430D20: 26 inches (660 mm).
        2. Vertical Outlet: PVC3240D20: 34 inches (864 mm).
        3. Vertical Outlet: PVC4048D20: 42 inches (1067 mm).
        4. Vertical Outlet: PVC4856D20: 50 inches (1270 mm).
        5. Vertical Outlet: PVC5664D20: 58 inches (1473 mm).
        6. Vertical Outlet: PVC6472D20: 66 inches (1676 mm).
        7. Horizontal Outlet: PVC2430D20SWO: 26 inches (660 mm).
        8. Horizontal Outlet: PVC3240D20SWO: 34 inches (864 mm).
        9. Horizontal Outlet: PVC4048D20SWO: 42 inches (1067 mm).
        10. Horizontal Outlet: PVC4856D20SWO: 50 inches (1270 mm).
        11. Horizontal Outlet: PVC5664D20SWO: 58 inches (1473 mm).
        12. Horizontal Outlet: PVC6472D20SWO: 66 inches (1676 mm).
      1. Cover Design:

\*\* NOTE TO SPECIFIER \*\* Select required cover design. Note that the stainless steel pan for setting tile inserts can accommodate tile inserts only up to 3/8 inch thick. Delete cover designs not required.

* + - * 1. Vertical.
        2. Horizontal.
        3. Cosmo.
        4. TileIn.
        5. Lines.
        6. Stream.

\*\* NOTE TO SPECIFIER \*\* Select required size. Delete sizes not required.

* + - * 1. Size: 32 inches (813 mm).
        2. Size: 40 inches (1016 mm).
        3. Size: 48 inches (1219 mm).
        4. Size: 56 inches (1422 mm).
        5. Size: 64 inches (1626 mm).
        6. Size: 72 inches (1829 mm).

\*\* NOTE TO SPECIFIER \*\* Retrofit Drain does not require a recess in the subfloor and fits within the thickness of 3/8 tile and a thin set bed. Retrofit features an internally sloped trough to prevent stagnant water. Delete if not required.

* + 1. Retrofit Series Linear Drains: Ultra-low profile linear drain consisting of a formed and welded stainless steel channel body and cover.
       1. Total Thickness of Channel Body and cover: 1/2 inch (13 mm).
       2. Channel Body Material: 18 Gauge stainless steel 316 L.
       3. Channel Body Trough Width: 2-1/2 inches (64 mm).
       4. Vertical Outlet: 2 inches (50 mm).
       5. Drain capacity with single outlet is 10 GPM. Flow rate when used at the entry to a curb-less shower as a primary shower drain is 5 GPM per waste outlet.
       6. Cover Assembly: Includes cover and tile edging.
       7. Channel Body and Cover Nominal Length:
          1. RETROD66: Body 66 inches (1676 mm) must be trimmed to 60 inches (1524 mm) or less, cover 60 inches (1524 mm).
       8. Cover Design: Blocks.

\*\* NOTE TO SPECIFIER \*\* WallDrain represents the latest innovation in linear drain design from QuickDrain USA. This revolutionary system allows for the most seamless design possible by installing the drain in the wall itself and sloping the shower floor to one subtle channel, there will be absolutely no disruption in the shower design. WallDrain features all of the hallmark QuickDrain elements of style and technology that have made our linear drains consistently superior. Delete if not required.

* + 1. WallDrain Series Linear Drains: Highly modified linear drain set vertically in the wall, consisting of a formed and welded drain body and stainless steel accessories.
       1. General: The drain shall be constructed in the wall without visible drain cover. The drain body and channel shall be concealed with application of the wall finish material to the assembly.
       2. Each WallDrain size is available as a standard vertical drain waste outlet configuration or a horizontal (SWO) configuration.
       3. Performance: Drain capacity for 2 inches (51 mm) outlet shall be 12 GPM (the actual volume is limited by the plumbing lines and P-trap). Multiple drains shall be linked together to accommodate greater anticipated water flow or larger shower size.
       4. Assembly Includes: Vertical installation panel, adjustment panel, trough extensions, and TileIn cover.
       5. Channel Body Material: 18 gauge, stainless steel 316 L.
       6. Channel Body and Cover Nominal Length:

\*\* NOTE TO SPECIFIER \*\* Select required length. Delete lengths and GPM not required.

* + - * 1. WallD48 Length: 26 to 48 inches (660 to 1219 mm), 12 GPM.
        2. WallD72 Length: 48 to 72 inches (1220 to 1829 mm), 12 GPM
        3. WallD96 Length: 52 to 96 inches (1320 to 2438 mm), 24 GPM.
        4. WallD144 Length: 96 to 144 inches (2438 to 3658 mm), 24 GPM.
  1. WATERPROOFING MEMBRANE
     1. QD Sheet Waterproofing: Polyethylene membrane with polypropylene fleece laminated on both sides.
        1. Polyethylene thickness: 0.018 inches (0.5 mm).
        2. Listed by ICC-ES to meet or exceed requirements of ANSI A118.10.
        3. Color: Gray.
        4. Corners and Seals:

\*\* NOTE TO SPECIFIER \*\* Select corner options required. Delete options not required.

* + - * 1. Provide matching preformed inside corners.
        2. Provide matching preformed outside corners.
        3. Provide matching preformed pipe seals.
        4. Provide matching preformed mixing valve seals.

\*\* NOTE TO SPECIFIER \*\* QDMUS is a one-part, elastomeric RTV (room temperature vulcanizing) hybrid material that combines technology to produce a material with many of the same characteristics of silicones and polyurethanes but with better performing characteristics. Delete if not required.

* + 1. Adhesive: QDMUS: One-part, modified polyurethane sealant adhesive
       1. Color: G-Grey.
       2. Uses: Sold as integral part of the QD sheet waterproofing systems for waterproofing any membrane seams, inside and outside corner attachments and membrane overlaps.

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

* 1. PREFABRICATED SHOWER COMPONENTS

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

* + 1. Shower Pan:

\*\* NOTE TO SPECIFIER \*\* Select required models. Delete models not required.

* + - 1. SL ADA Pan: Fully sloped prefabricated, rigid foam, shower pan wedges made of rigid 100% post-consumer recycled PET foam.
         1. No ramp or compensation needed for true flush entry showers.
         2. For use with any topical sheet or liquid waterproofing conforming to the standards.
         3. Density: 5 lbs/cu.ft. (80 kg/cu.m.).
         4. Compressive Strength: 145 psi, minimum.
         5. Oversized material, trimmable on site with a utility knife.

\*\* NOTE TO SPECIFIER \*\* Select required size. For Custom size, contact QuickDrain USA technical support. Delete sizes not required.

* + - * 1. Size: SLPANADA48: 48 x 48 inches (1219 x 1219 mm)
        2. Size: SLPANADA64: 48 x 64 inches (1219 x 1626 mm), drain on 64 inch side.
        3. Size: SLPANADA72XL: 74 x 72 inches (1880 x 1829 mm), drain on 72 inch side.
        4. Size: SLPANADACUSTOM: Any length x 96 inches (2438 mm), made of 16 inch (406 mm) wide sections.
      1. SLPAN Standard: Fully sloped prefabricated, rigid foam shower pan wedges made from 100% post-consumer recycled PET foam.
         1. For use with any topical sheet or liquid waterproofing conforming to the standards.
         2. Density: 5 lbs/cu.ft. (80 kg/cu.m.).
         3. Compressive Strength: 145 psi, minimum.
         4. Oversized material, trimmable on site with a utility knife.
         5. Assembly Includes: Drain support frame (drain cradle), QuickSlope (sloped shower pan base), and curb.

\*\* NOTE TO SPECIFIER \*\* Select required size. Note that dimensions indicated maximum outside dimensions of shower pan and digits indicated size of the drain. Delete sizes not required.

* + - * 1. Size: SLPAN32: 34.5 x 64 inches (876 x 1626 mm).
        2. Size: SLPAN32XL: 34.5 x 77 inches (876 x 1955 mm).
        3. Size: SLPAN40: 42.5 x 64 inches (1080 x 1626 mm).
        4. Size: SLPAN40XL: 42.5 x 77 inches (1080 x 1955 mm).
        5. Size: SLPAN48: 50.5 x 64 inches (12183 x 1626 mm).
        6. Size: SLPAN48XL: 50.5 x 77 inches (1283 x 1955 mm).
        7. Size: SLPAN56: 58.5 x 64 inches (1486 x 1626 mm).
        8. Size: SLPAN56XL: 58.5 x 77 inches (1486 x 1955 mm).
        9. Size: SLPAN64: 66.5 x 64 inches (1689 x 1626 mm).
        10. Size: SLPAN64XL: 66.5 x 77 inches (1689 x 1955 mm).
        11. Size: SLPAN72: 74.5 x 64 inches (1892 x 1626 mm).
        12. Size: SLPAN72XL: 74.5 x 77 inches (1892 x 1955 mm).

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

* + - 1. SLPAN SWO: Fully sloped prefabricated, rigid foam, shower pan made of rigid 100% post-consumer recycled PET foam.
         1. Used for above the floor plumbing rough in with horizontal (SWO) drain bodies.
         2. For use with any topical sheet or liquid waterproofing conforming to the standards.
         3. Density: 5 lbs/cu.ft. (80 kg/cu.m.).
         4. Compressive Strength: 145 psi, minimum.
         5. Oversized material, trimmable on site with a utility knife.
         6. Assembly Includes: Drain support frame (drain cradle), QuickSlope (sloped shower pan base), curb, and flat panels.

\*\* NOTE TO SPECIFIER \*\* Select required size. Note that dimensions indicated maximum outside dimensions of shower pan and digits indicated size of the drain. Delete sizes not required.

* + - * 1. Size: SLPAN32SWO: 34.5 x 64 inches (876 x 1626 mm).
        2. Size: SLPAN32XLSWO: 34.5 x 77 inches (876 x 1955 mm).
        3. Size: SLPAN40SWO: 42.5 x 64 inches (1080 x 1626 mm).
        4. Size: SLPAN40XLSWO: 42.5 x 77 inches (1080 x 1955 mm).
        5. Size: SLPAN48SWO: 50.5 x 64 inches (12183 x 1626 mm).
        6. Size: SLPAN48XLSWO: 50.5 x 77 inches (1283 x 1955 mm).
        7. Size: SLPAN56SWO: 58.5 x 64 inches (1486 x 1626 mm).
        8. Size: SLPAN56XLSWO: 58.5 x 77 inches (1486 x 1955 mm).
        9. Size: SLPAN64SWO: 66.5 x 64 inches (1689 x 1626 mm).
        10. Size: SLPAN64XLSWO: 66.5 x 77 inches (1689 x 1955 mm).
        11. Size: SLPAN72SWO: 74.5 x 64 inches (1892 x 1626 mm).
        12. Size: SLPAN72XLSWO: 74.5 x 77 inches (1892 x 1955 mm).

1. EXECUTION
   1. EXAMINATION
      1. Installer shall examine substrates and conditions under which this work is to be performed and notify Architect in writing, of conditions detrimental to the proper completion of the work. Do not proceed with work until unsatisfactory conditions are corrected. Beginning of installation will be construed as Installer accepting substrates and conditions.
      2. Do not begin installation until substrates have been properly prepared.
      3. Verify drain location and compatibility with drain system specified.
      4. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
   2. PREPARATION
      1. Clean surfaces thoroughly prior to installation.
      2. Prepare surfaces by removing all debris, sharp edges and protrusions that could damage the waterproof integrity of the system.
      3. 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 linear shower drains in strict compliance with manufacturer's instructions and recommendations and approved details.

\*\* NOTE TO SPECIFIER \*\* Affords users greater stability. The multi-way slope in a traditional round drain shower makes it very difficult to steady a wheelchair and can be hazardous to those with stability issues. Delete if not required.

* + 1. ADA Accessible Design (Zero Entry): Installation shall be a single plane slope using a linear drain shower pan. Installation shall be installed on a flat floor sloped to the full width of the shower entry.
    2. Coordinate with installation of other components specified, and with setting materials for floor finish materials.
    3. Water Testing: Test all drains together with shower pans after installation of the waterproofing prior to tile installation. Testing duration shall be a minimum of 24 hours under 2 inches (51 mm) of water.
  1. CLEANING
     1. Clean exposed surfaces using manufacturer recommended materials and methods. Remove and replace work which is damaged or which cannot be successfully cleaned.
     2. Test all drain systems to verify compliance with specified requirements.
  2. PROTECTION
     1. Protect installed products until completion of project.
     2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION