

# BARRIER FREE GUIDE

## LINEAR DRAIN PLACEMENT

For a barrier free installation the most important factor to consider is the drain placement. The placement will affect installation and design options, build up amount and depression amount.

## INSTALLATION AND DESIGN OPTIONS

Installing a shower drain without a curb, barrier, or threshold creates a seamless look with easy accessibility to the wet area. To achieve an ideal installation, floor heights should be equal between the shower area (wet area), outside the shower (dry area), and next room.

## MINIMUM BUILD UP AT THE ENTRANCE OF THE SHOWER

Minimum build up at the entrance of the shower is calculated to determine if and how much the shower area must be depressed for a barrier free installation.

## WATERPROOFING METHOD

The type of waterproofing will affect the amount of build up because of the height of the compatible drain and waste line connection type.

**TRADITIONAL WATERPROOFING:**  
(PVC/Vinyl liner, Lead/copper pan, Hot mop, Rubber liner, Fiberglass)

Traditional waterproofing has a larger overall build up due to taller channels and a clamp down drain installation. The channel height ranges from 1-7/16" to 2-3/8".

**LIQUID/FABRIC WATERPROOFING:**  
(Liquid applied or Fabric Sheet Membrane)

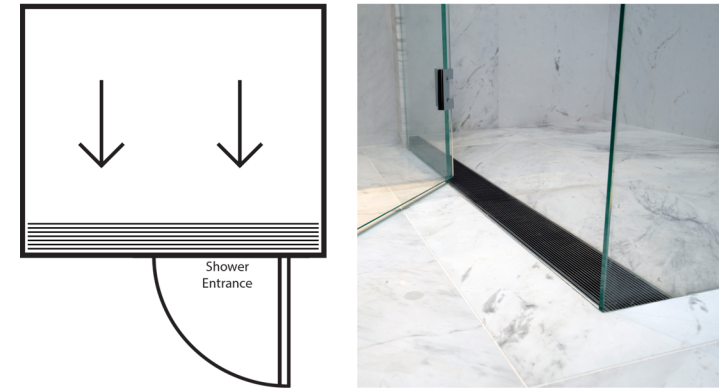
Liquid/ Fabric waterproofing installations have less overall build up due to shallow channels and a no hub installation. The channel height ranges from 13/16" to 7/8".

**\*NOTE:** INSTALLER MUST VERIFY ALL ROUGH-IN DIMENSIONS PRIOR TO INSTALLATION AND CONSULT LOCAL AND NATIONAL CODES. CONFORMITY AND COMPLIANCE TO LOCAL AND NATIONAL CODES ARE THE RESPONSIBILITY OF THE INSTALLER.

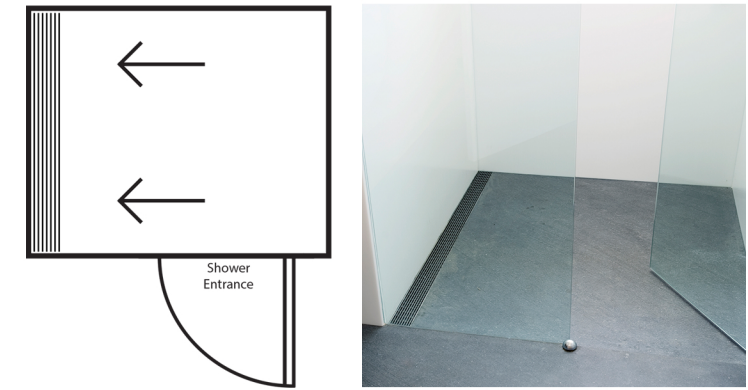
### PARALLEL TO SHOWER ENTRANCE BACK WALL



### PARALLEL TO SHOWER ENTRANCE THRESHOLD



### PERPENDICULAR TO SHOWER ENTRANCE SIDE WALL



- Most flexible installation option
- Can be installed wall to wall, flush against the wall, or off of the walls
- Stock sizes can be used
- Any grate style can be used

The minimum buildup for a back wall installation is dependent on the depth of the shower and degree of slope.\*

Example: 4' x 4' shower with a slope of 1/4" per foot would have a slope of 1".

- Least amount of overall build up at the entrance of the shower - ideal for dealing with height restrictions
- Must be installed wall to wall
- Must work within stock dimensions, Site Sizable, or custom drain
- Narrow grate styles and Tile insert frames can not be used

The minimum buildup for a back wall installation is dependent on the height of the drain above the slab/subfloor.\*

- Usually the most amount of build up
- Can create pitch challenges between wet and dry area
- Can be installed wall to wall, flush against the wall, or off of the walls
- Stock sizes can be used

Slab/subfloor must be depressed to allow the finished surface of the shower floor to be 1/2" - 3/8" below the finished surface of the dry area.\*

Example: 4' x 4' foot shower with a slope of 1/4" per foot would have a slope of 1".

#### TRADITIONAL WATERPROOFING

$$\frac{\text{Drain Channel Height Above Subfloor} + (\text{Shower Depth (A)} \times 0.25)}{\text{Height at entrance of shower}}$$

**2-7/16" to 3-3/8"**  
(Varies by model)

#### LIQUID/ FABRIC WATERPROOFING

$$\frac{\text{Drain Channel Height Above Subfloor} + \text{Tile Thickness} + \text{Thinset Thickness} + (\text{Shower Depth (A)} \times 0.25)}{\text{Height at entrance of shower}}$$

**2-5/16" to 2-3/8"**  
(Varies by model)

#### TRADITIONAL WATERPROOFING

$$\frac{\text{Drain Channel Height Above Subfloor}}{\text{Height at entrance of shower}}$$

**1-7/16 to 2-3/8"**  
(Varies by model)

#### LIQUID/ FABRIC WATERPROOFING

$$\frac{\text{Drain Channel Height Above Subfloor} + \text{Tile Thickness} + \text{Thinset Thickness}}{\text{Height at entrance of shower}}$$

**1-5/16 to 1-3/8"**  
(Varies by model)

#### TRADITIONAL WATERPROOFING

$$\frac{\text{Drain Channel Height Above Subfloor} + (\text{Shower Depth (A)} \times 0.25) + 1/2"}{\text{Height at entrance of shower}}$$

**2-15/16" to 4-7/8"**  
(Varies by model)

#### LIQUID/ FABRIC WATERPROOFING

$$\frac{\text{Drain Channel Height Above Subfloor} + \text{Tile Thickness} + \text{Thinset Thickness} + (\text{Shower Width (B)} \times 0.25) + 1/2"}{\text{Height at entrance of shower}}$$

**2-13/16" to 2-7/8"**  
(Varies by model)

## DEPRESSION/ DROPPED SUBFLOOR DIMENSION:

Calculate the height at entrance of shower (see above). If this dimension is greater than the floor height of the dry area, the slab/subfloor of the shower area must be depressed by at least that difference in height.

