



SUREVOID® AND STORMVOID®

Installation Instructions



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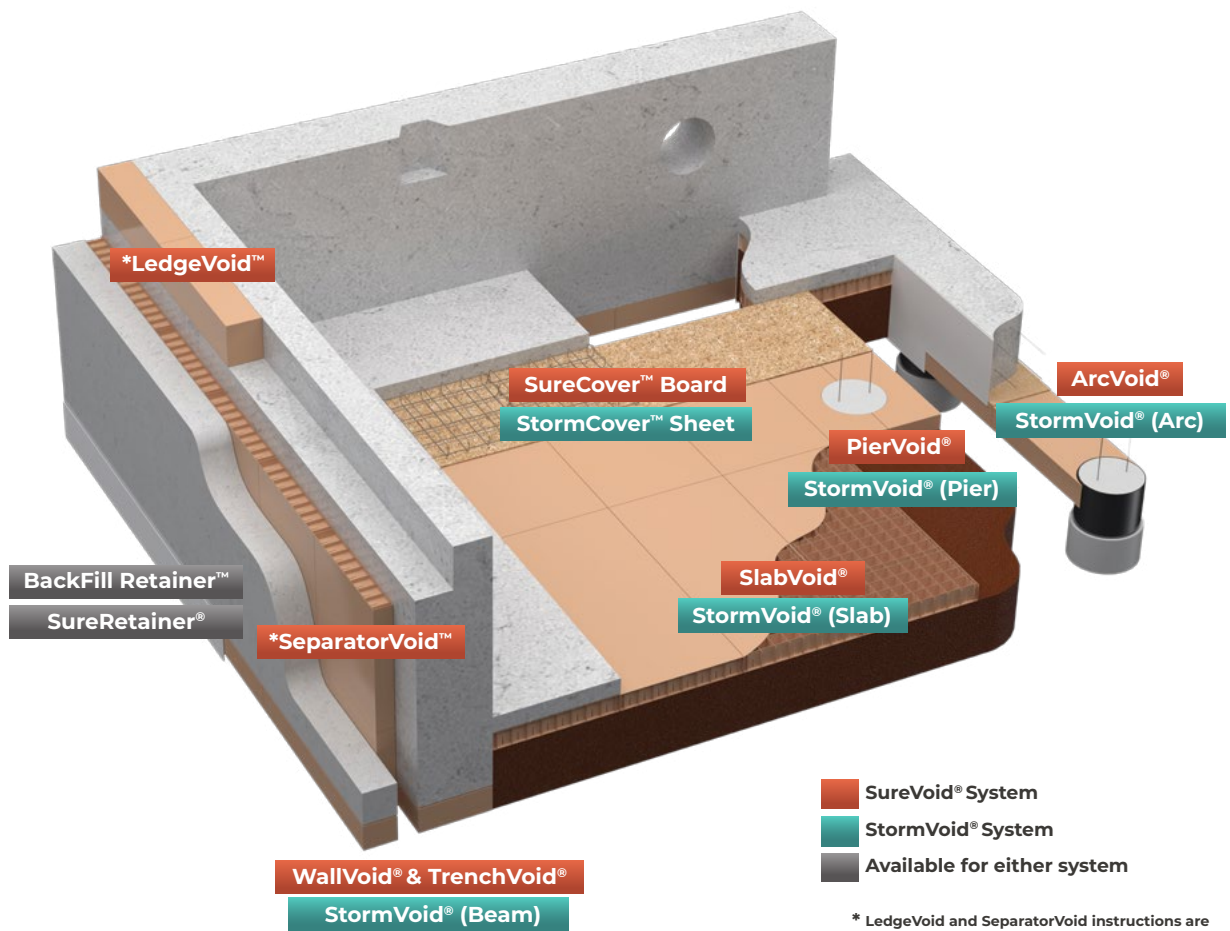
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System Components

This manual covers the installation of SureVoid® and StormVoid® System components.



VoidForm systems are delivered directly to the job site. Each trailer holds 3,000 to 7,000 sf of material and can be rented by the day to keep products dry and organized. Load sheets should reflect the proper components before installation begins.



Tool Recommendations

The following tools are recommended for installing SureVoid and StormVoid systems:



Hand Saw



Razor Knife



Tape Measure



Marker

Storage Recommendations

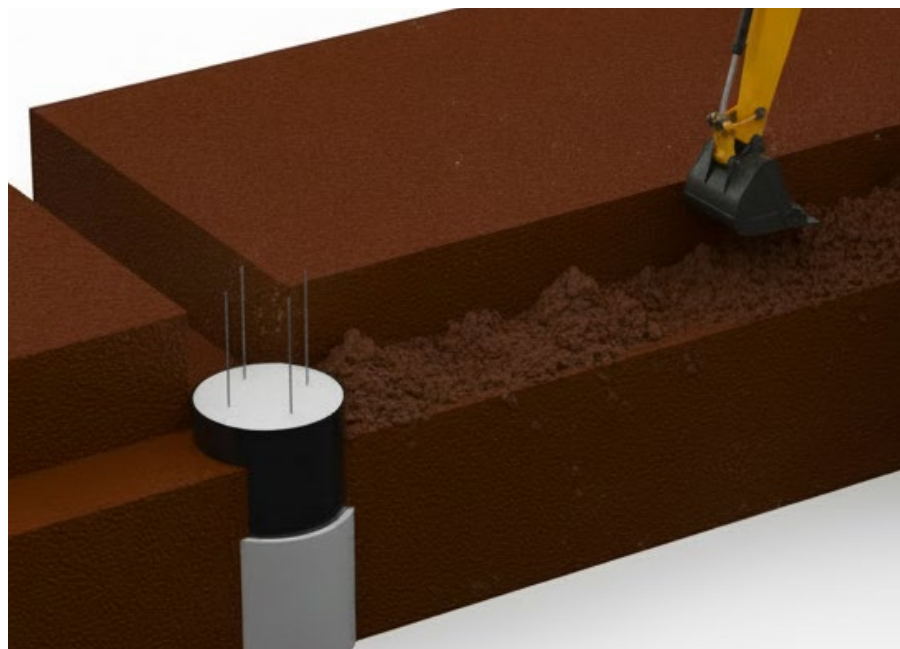


Keep all void forms dry and unwrapped in a trailer or watertight container away from moisture and wet weather.



Exposing SureVoid and StormVoid to wet weather or moisture ***prior to installation*** can compromise the structural integrity of the void forms.

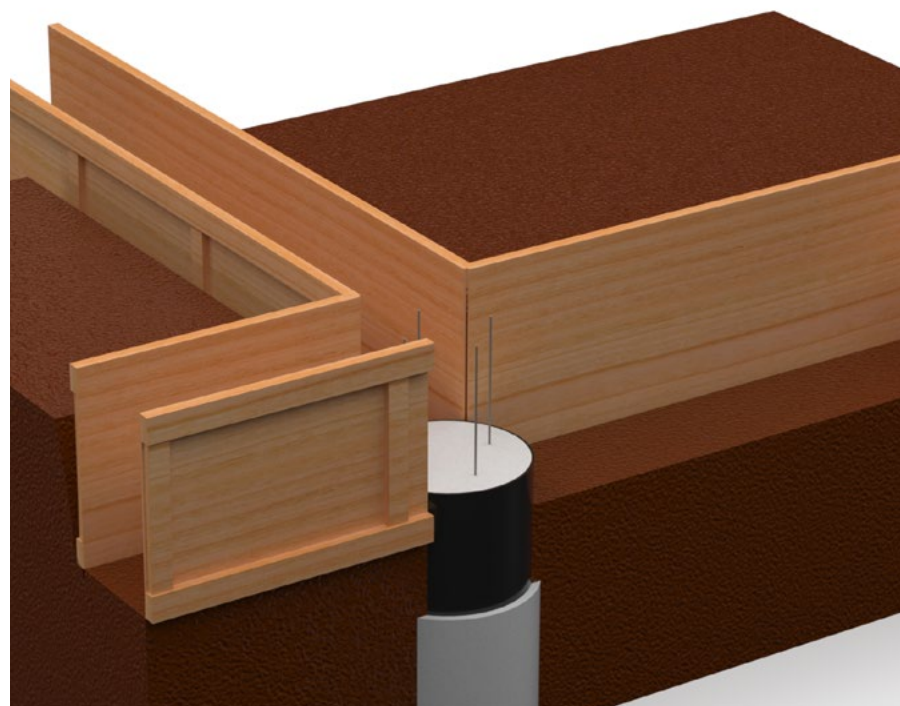
Grade Beams & Walls



Step 1

Construct concrete formwork above grade or excavate per plans in trenched beam applications.

Prepare the grade beneath the void form to an even plane by removing clumps, rocks, and debris that may puncture or create point loading.

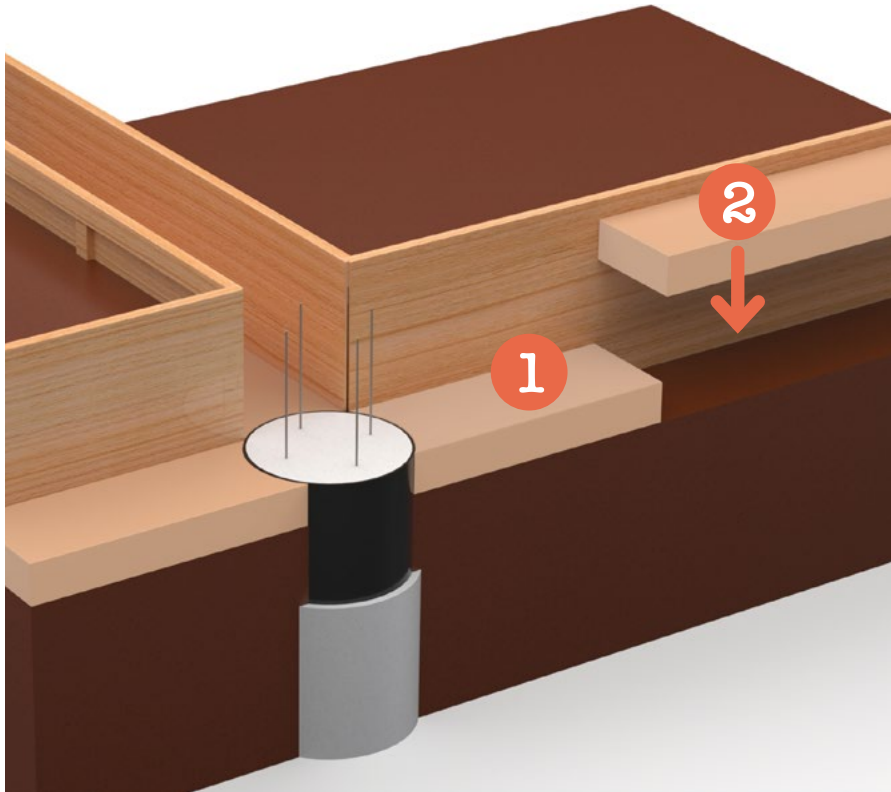


Step 2

When applicable, install temporary formwork or permanent retainers on both sides of trenches to form grade beams.

Horizontal spacing between vertical form panels should match the width of the void forms to be placed as well as grade beams.

Grade Beams & Walls



Pro Tip: To fill areas less than 12" long cut the adjacent piece in half, then fill the space. See Page 21 for details.

Step 3

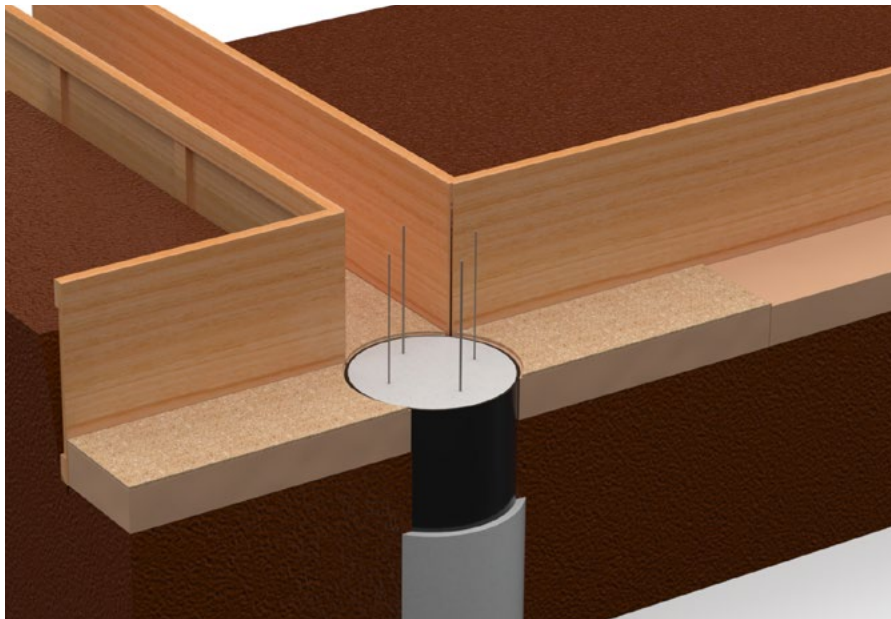
Position ArcVoid or StormVoid (Arc) against the pier's circular edges.

Place standard TrenchVoid, WallVoid, or StormVoid (Beam) end to end in the wall line with the stapled side down.

Cross-cut pieces upside down with a handsaw or knife to fit non-standard areas.



Cut sections at least 12" in length. Never rip void forms.



Step 4

Place SureCover Board or StormCover Sheet over the entire void form surface to span small gaps.

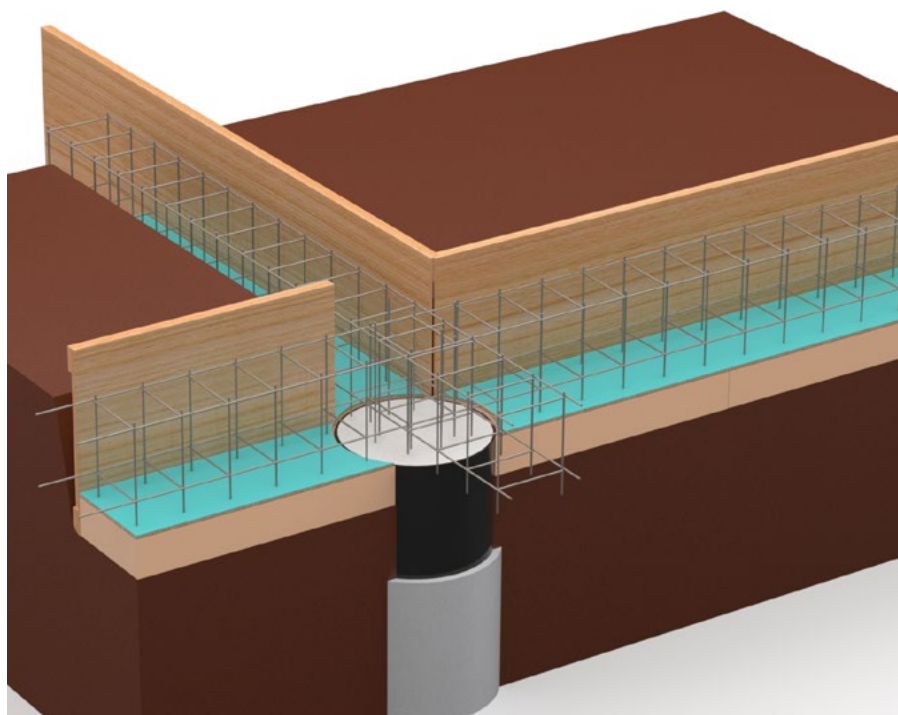
Insert End Caps on open-ended pieces that will be exposed to fresh concrete.

Grade Beams & Walls

Step 5

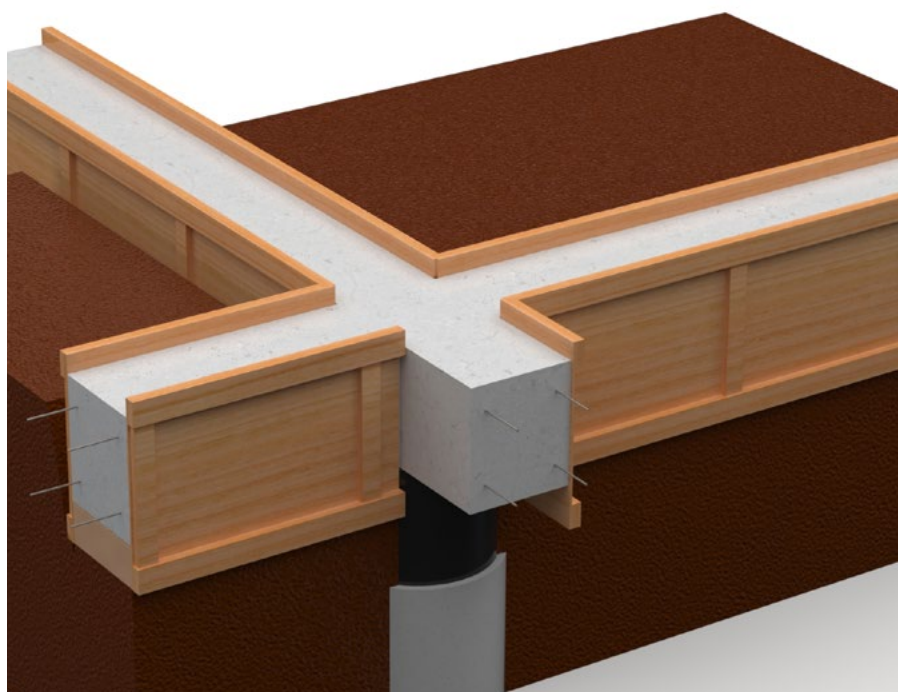
Install vapor barrier per the specification.

Install steel over the SureCover Board or StormCover Sheet.

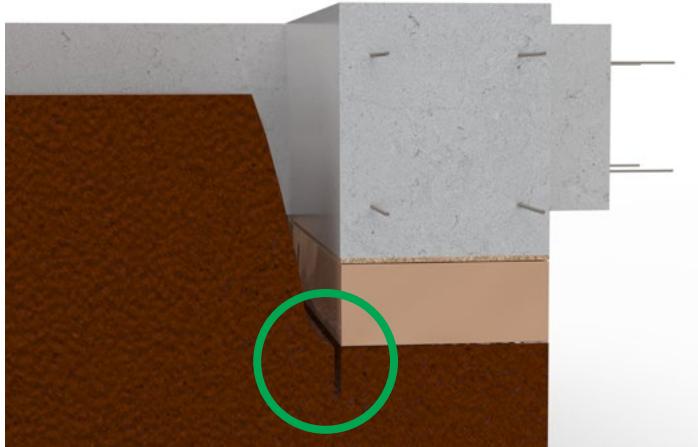


Step 6

Pour concrete.



Grade Beams & Walls

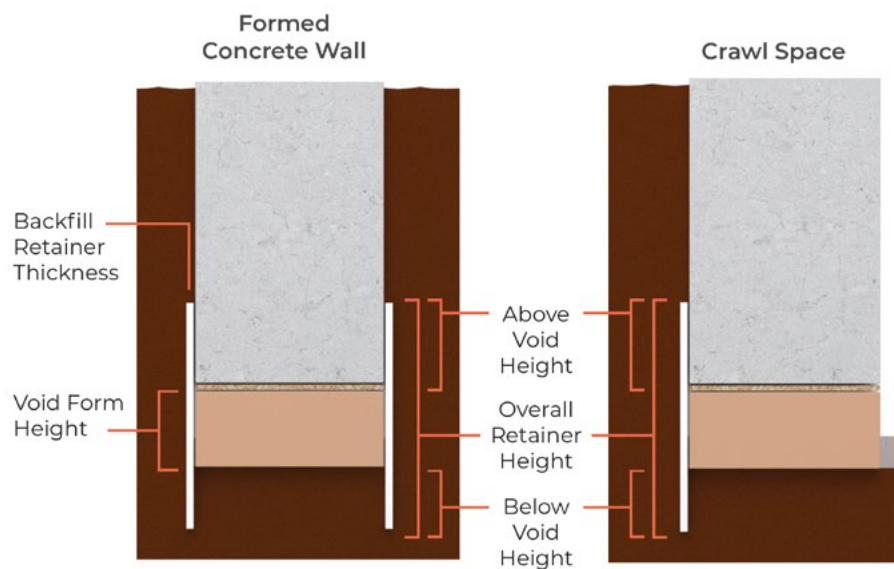


Step 7

After the concrete has set, remove temporary formwork.

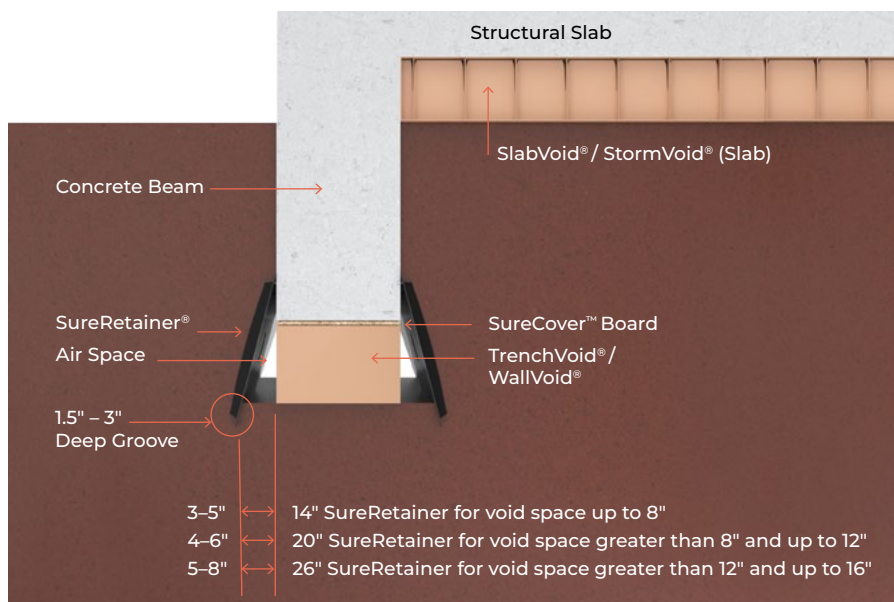
Step 8

Create a groove in the soil at the proper depth along the bottom edge of the void form.



BackFill Retainer Preparation

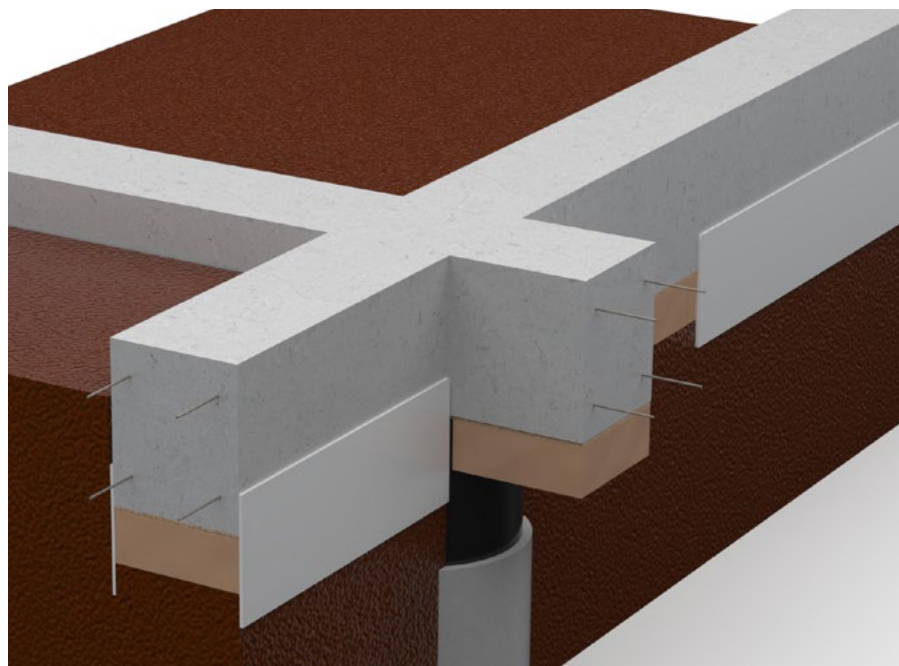
The groove should be plumb with the side of the grade beam and void form below, allowing its placement to be flush with the side of the beam.



SureRetainer Preparation

The groove should extend out from 3" to 8" from the void form. This will provide a slight angle to the soil retainer when installed.

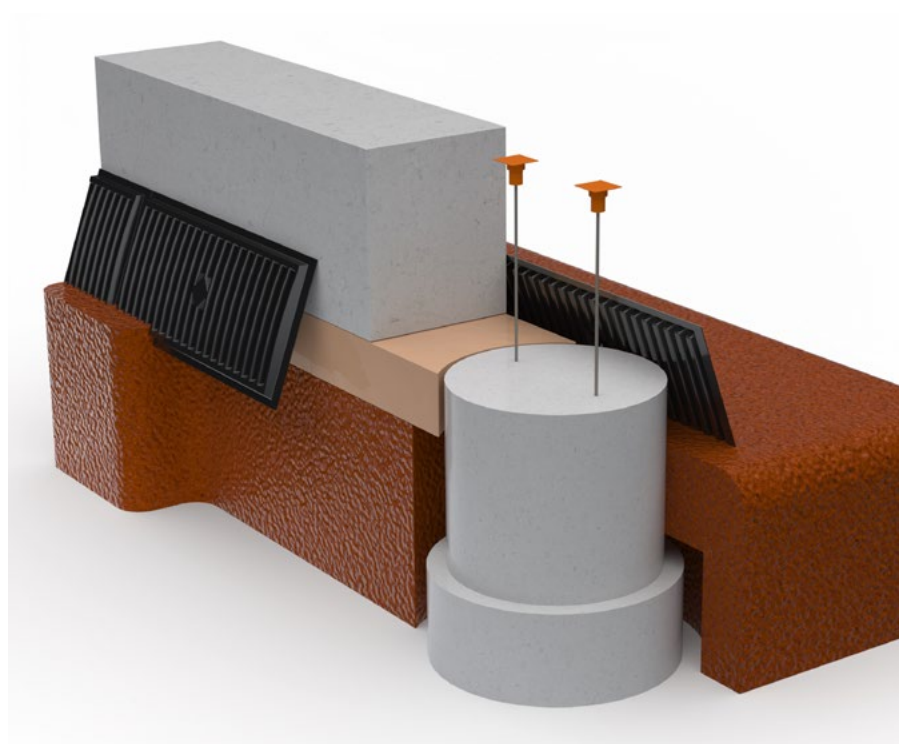
Grade Beams & Walls



BackFill Retainer Placement

Install BackFill Retainer flush with grade beams prior to backfilling.

Ensure they provide complete coverage along each beam length.



SureRetainer Placement

Place the bottom edge of each panel firmly into the groove.

Ensure the retainer is positioned at a slight angle against the concrete beam. The top flange can be attached to the beam if permitted.

Overlap panels to ensure complete coverage along each grade beam or wall.

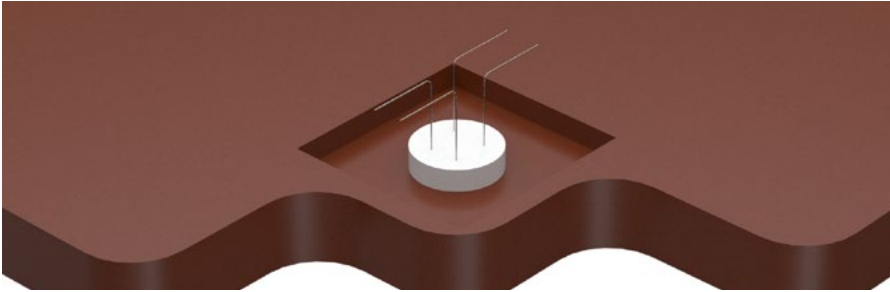
Carefully backfill.

Slabs



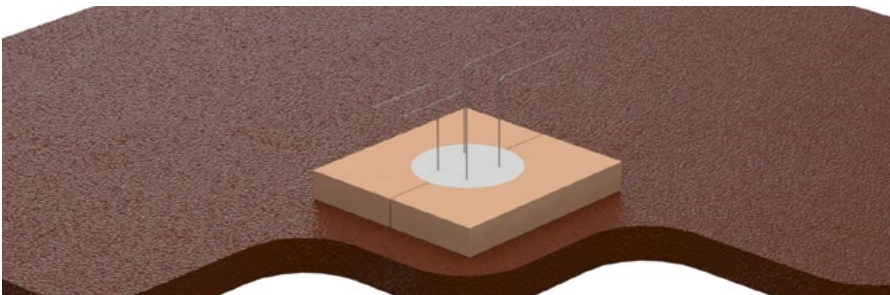
Step 10

Prepare the grade beneath the void form to an even plane by removing clumps, rocks, and debris.



For thickened slab or "dropped head" conditions, over-excavate the area surrounding the drilled pier to accommodate the lower portion of the void form.

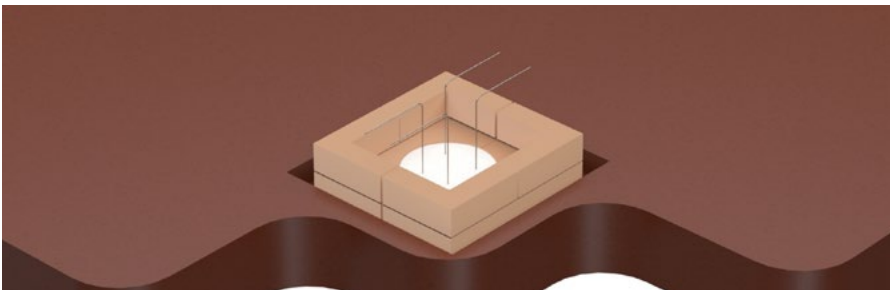
Slabs



Step 11

Position PierVoid or StormVoid (Pier) sections against the pier's circular edges.

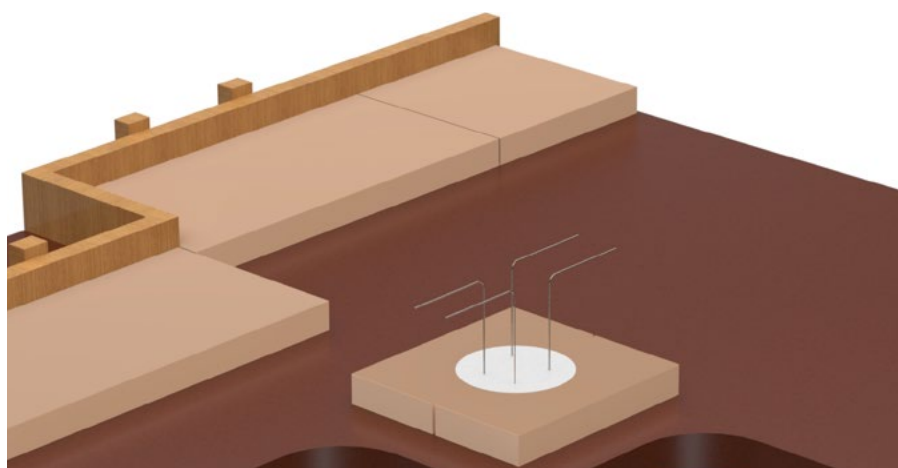
Backfill the lower portion of drop-panel void forms up to an elevation consistent with the remaining grade.



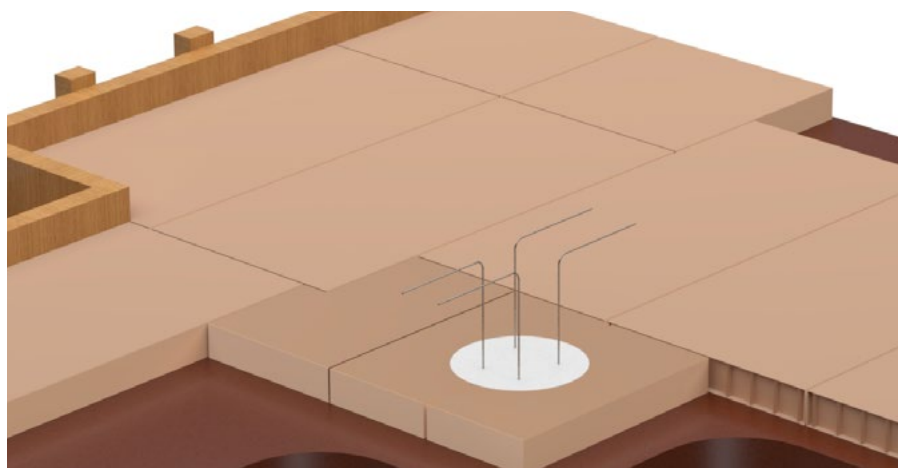
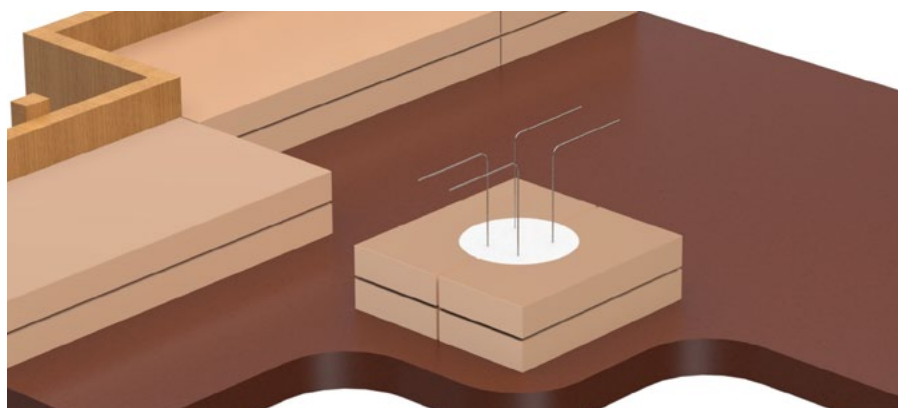
Place PierVoid or StormVoid DropPanel void forms around the piers.

Backfill around the lower portion of the void forms to match the surrounding grade.

Slabs



Do not leave gaps between void forms.



Pro Tip: To fill areas less than 12" long cut the adjacent piece in half, then fill the space. See Page 21 for details.

Step 12

Start at the perimeter and install standard SlabVoid or StormVoid (Slab) pieces. Work towards the piers, ensuring the stapled side is down.

Open ends should not be placed along turn-down edges where concrete can intrude into the interior.

Use End Caps to cover open ends exposed to fresh concrete.

For SureVoid, where void heights are greater than 12", field stacking is required as shown. StormVoid arrives at the job site pre-stacked and wrapped for void heights greater than 12".

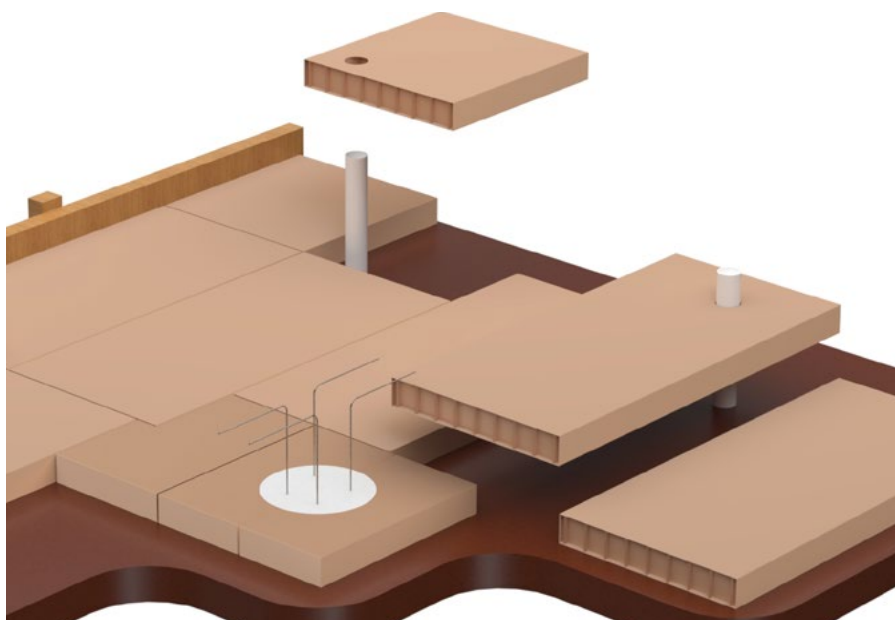
Step 13

Cross-cut pieces upside down with a handsaw or knife to fit non-standard areas.



Cut sections at least 12" in length. Never rip void forms.

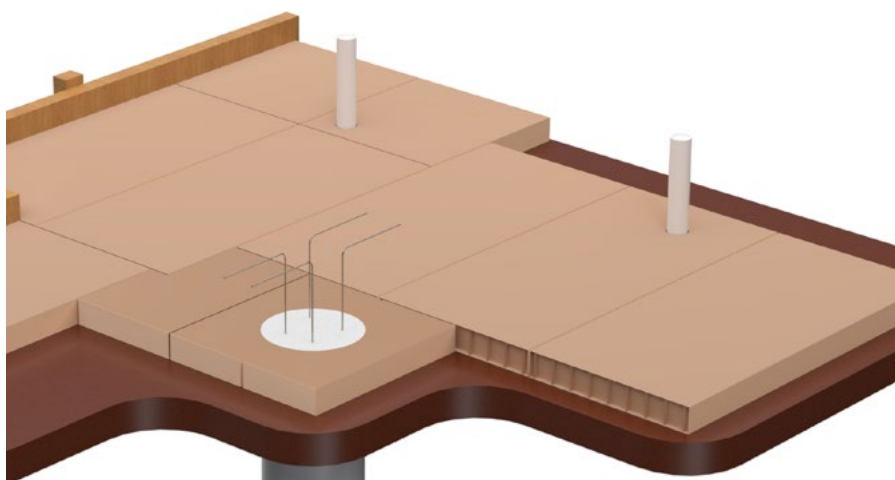
Slabs



Step 14

Where plumbing risers penetrate the void forms, mark the location and diameter of the pipe on the top and bottom surfaces of the void form.

Cut holes in the top and bottom outer cover at the appropriate diameter.



Step 15

Cut the support grid members in the center of the hole and tuck the ends into the interior, between the top and bottom outer covers to clear hole.

Slide the void form over the pipe and place it into position on grade.

Slabs

Step 16

Place SureCover Board or StormCover Sheet over the entire void form surface to span small gaps, prevent punctures, and distribute working loads.

Step 17

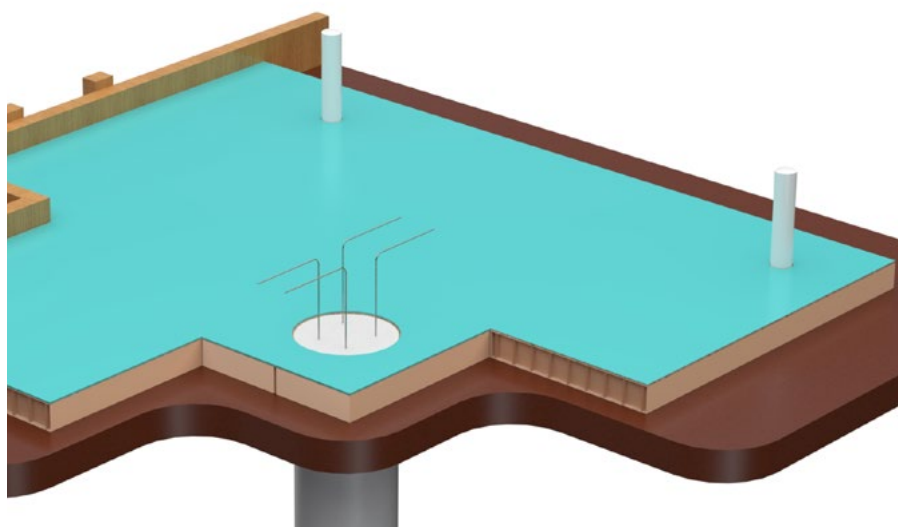
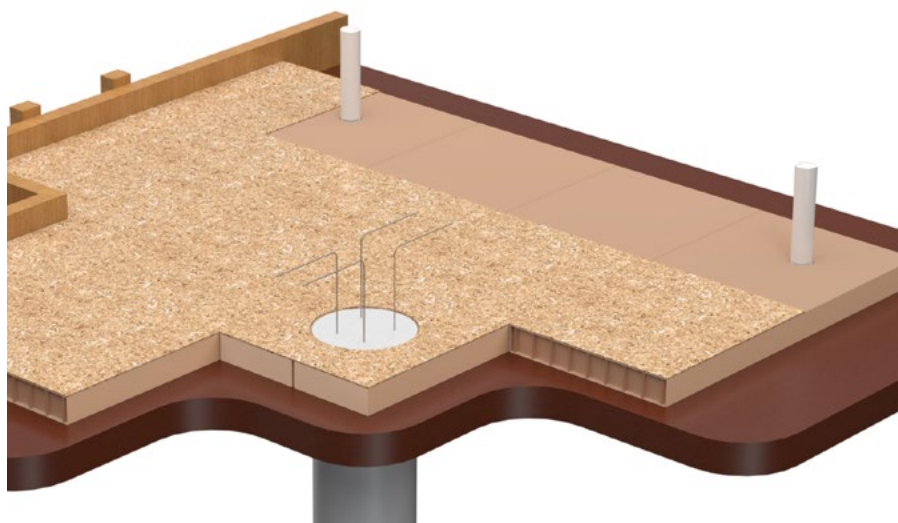
Cut holes where plumbing risers, steel, and pier tops penetrate the SureCover Board or StormCover Sheet.

Cut holes to fit tightly around pipes.

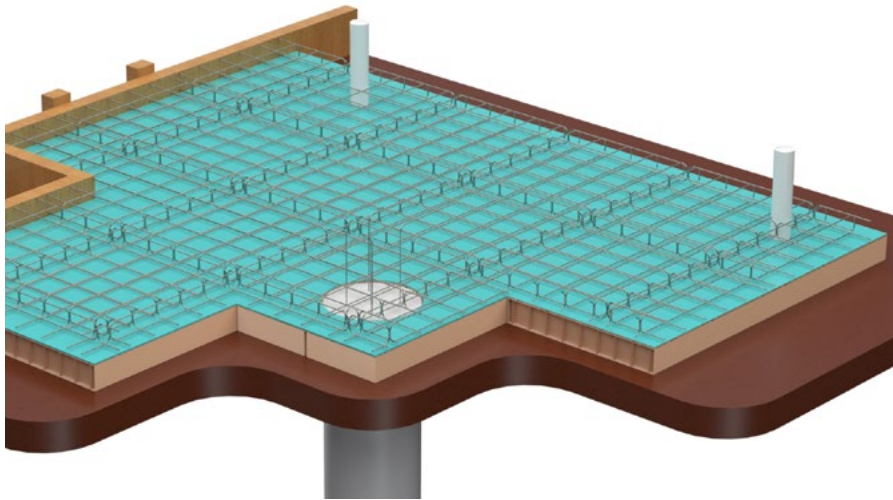
Fill any gap between pipes and SureCover Board or StormCover Sheet with expansive foam (or alternate sealant), taking care not to significantly displace the underlying void cavity.

Step 18

Install vapor barrier per manufacturer's specification.



Slabs



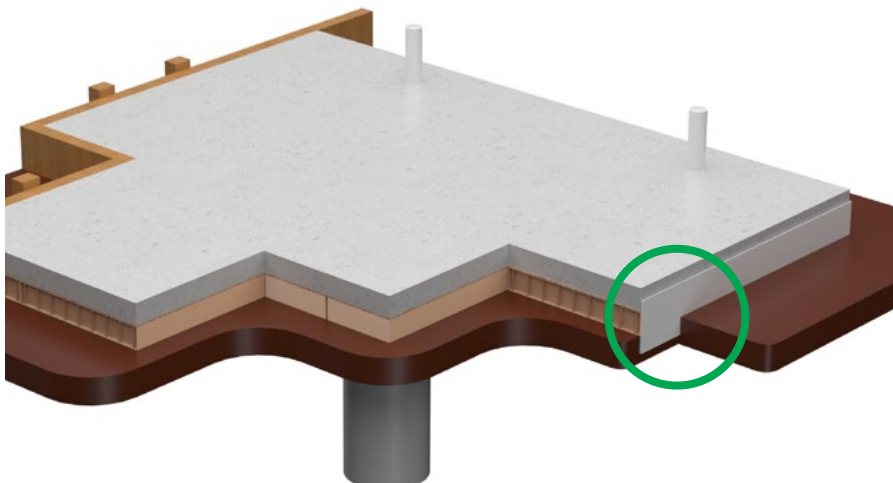
Step 19

Install steel.

Place concrete.



In order to maintain a humid condition under the slab, do not remove exterior forms until soil retainers can be installed around the slab perimeter and backfilled or until an adjoining section is ready to be placed when pouring in sections.



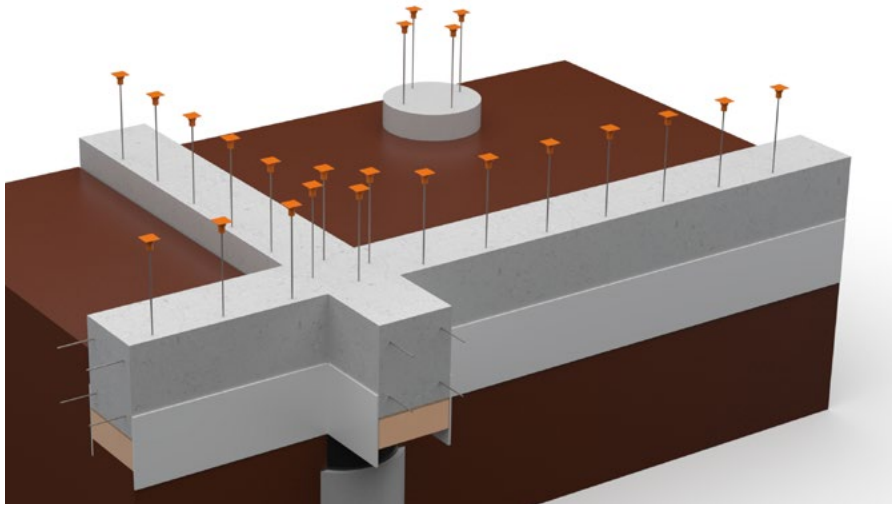
Step 20

Install soil retainers against concrete edges where void forms are exposed.

Follow instructions in Step 7 and 8 to install soil retainers.

Backfill as needed.

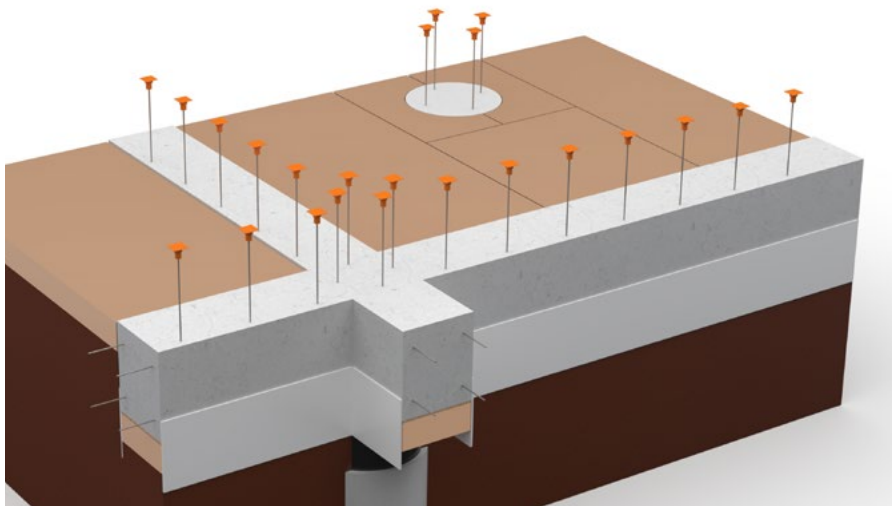
2-Stage Pour



Suspended Slab Instructions

These instructions are for a 2-stage concrete pour where the slab will be poured after grade beams have been cast.

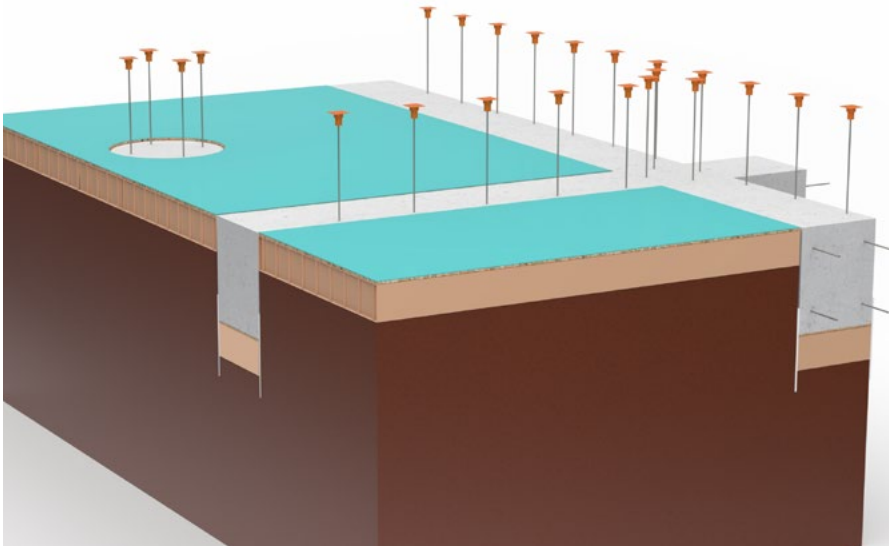
The top of the slab void forms will be flush with the top of the grade beams and piers once installed.



Follow instructions in Steps 11-13 to place void forms to fill entire slab area:

1. Place pier void forms.
2. Place whole slab pieces.
3. Cut and place non-modular pieces where needed.

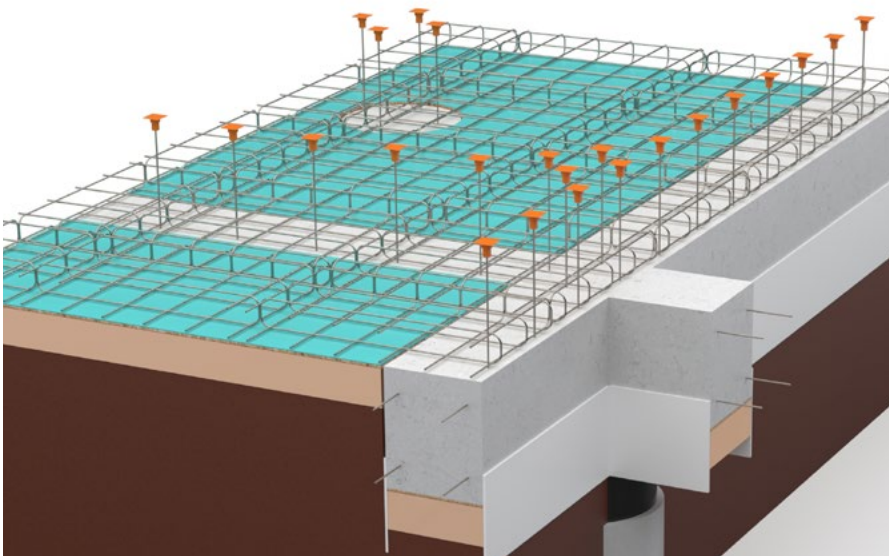
2-Stage Pour



Install cover board.

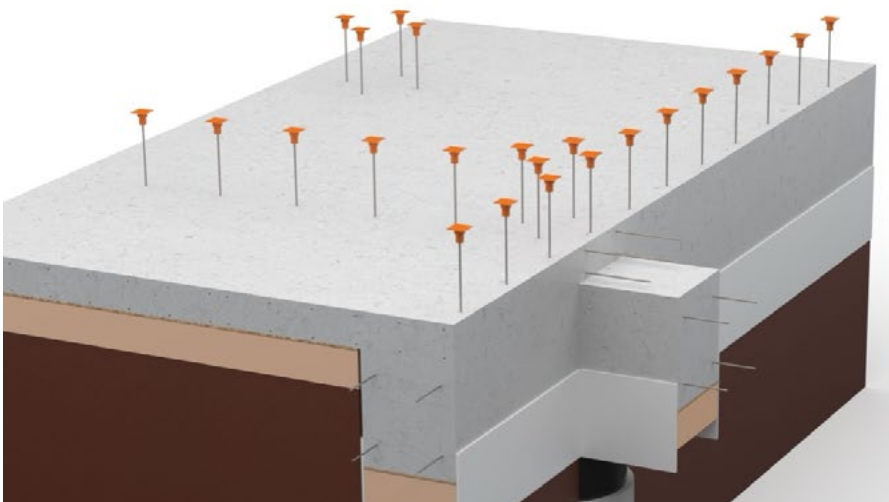
Install vapor barrier.

Make cutouts for pier tops and plumbing risers where needed.



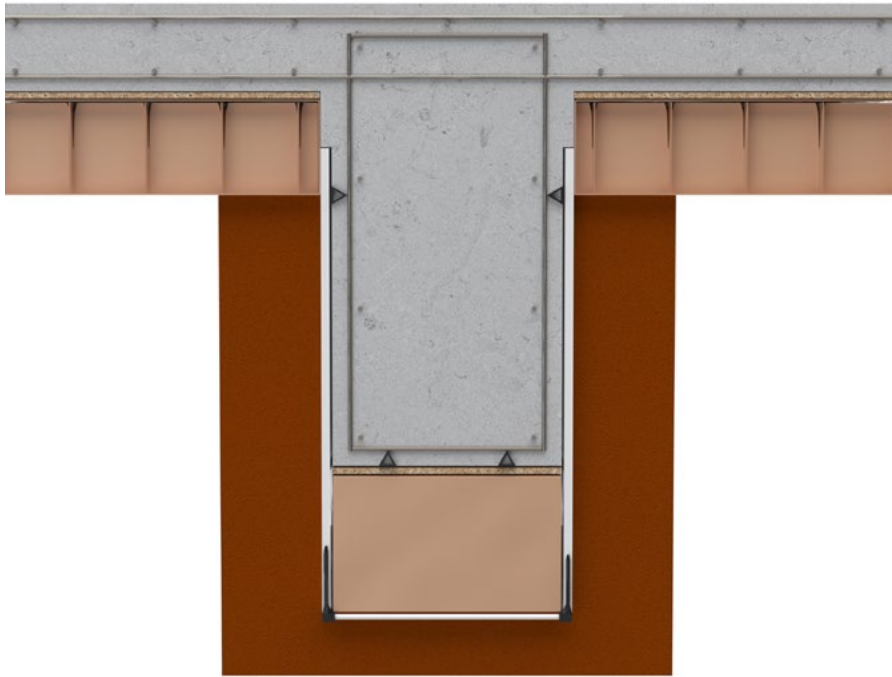
Install slab rebar.

Tie to grade beam steel.



Pour concrete.

Monolithic Forming



These instructions are for a single pour where the concrete slab and grade beams are placed simultaneously.

The system uses a combination of connected BackFill Retainer panels and covered void forms for both slabs and grade beams to create void space in monolithic forming applications.

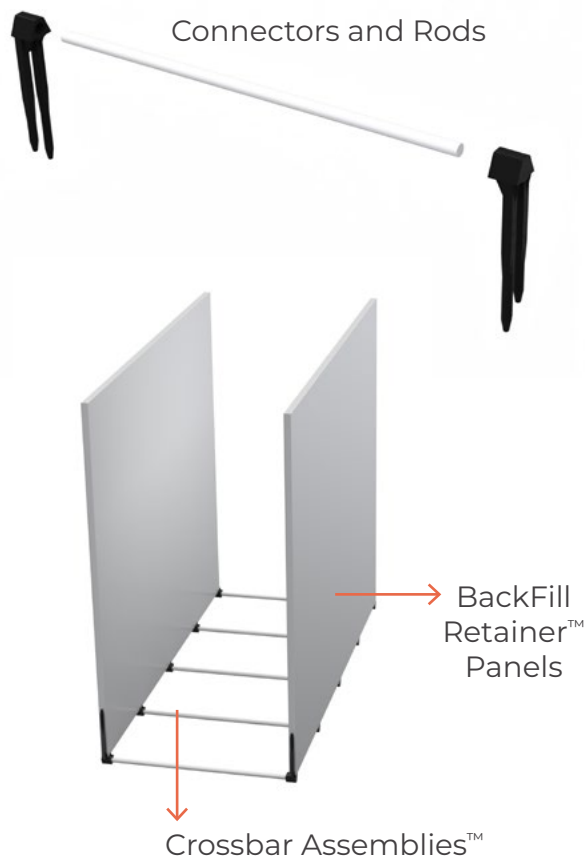
Step 1

Excavate trenches to the designated width and depth, ensuring the bottom is free from loose soil, clumps, rocks, or debris.

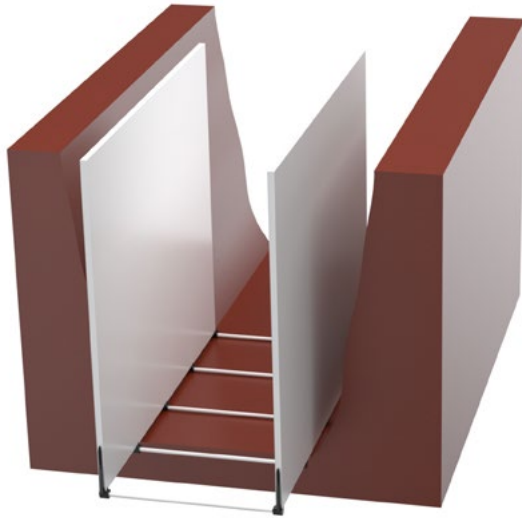
Step 2

Assemble the Connectors and Rods to make Crossbar Assemblies.

Insert a Crossbar Assembly into the bottom flutes of both the BackFill Retainer Panels, every 12" on center.



Monolithic Forming



Step 3

Place the connected panels into the excavated trench, with the inserted Connector Assemblies at the bottom.

Step 4

At piers, install ArcVoid or StormVoid (Arc) between the vertical panels on top of the Connector Assemblies. See Under Grade Beams & Walls, Step 3 for detailed instructions.



Install WallVoid, TrenchVoid or StormVoid (Beam) along the rest of the runs throughout the trench.

Place SureCover Board or StormCover Sheet over the void forms.



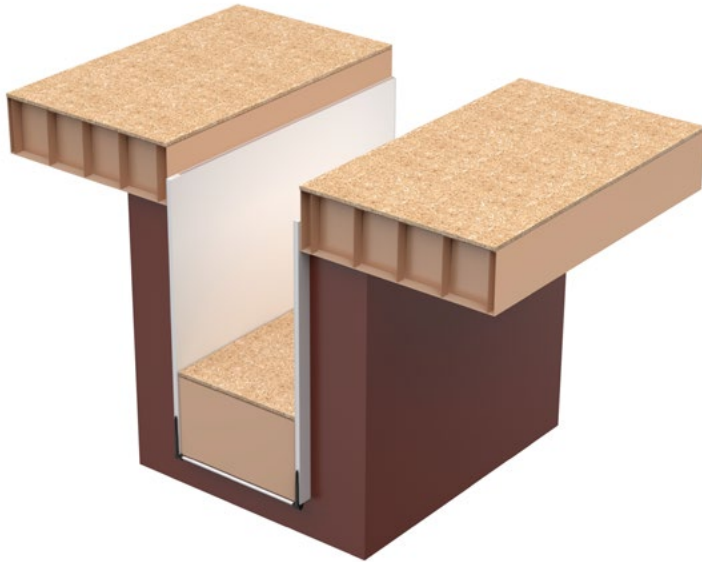
Step 5

Place the assembled rebar cage complete with rebar chairs on top of the SureCover Board or StormCover Sheet.

Step 6

Backfill open areas simultaneously.

Monolithic Forming

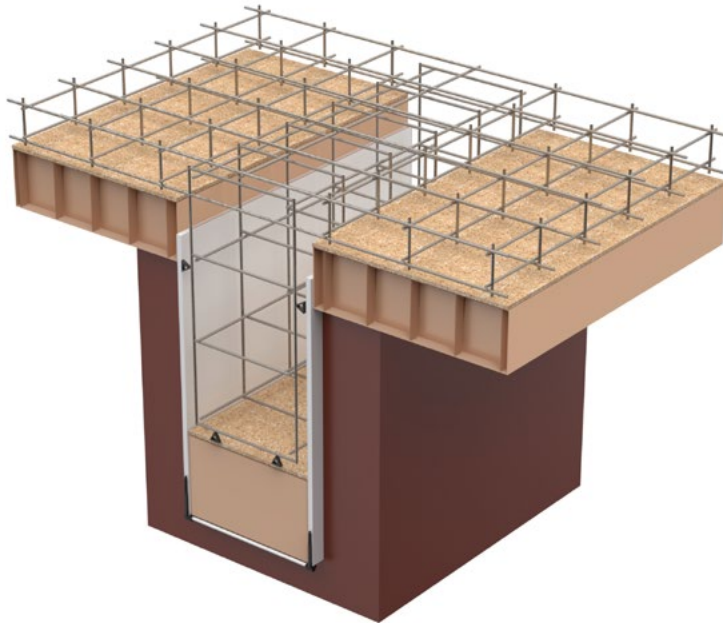


Step 7

Position SlabVoid or StormVoid (Slab) against the outer top edge of each vertical side panel.

Place SureCover Board or StormCover Sheet over void forms.

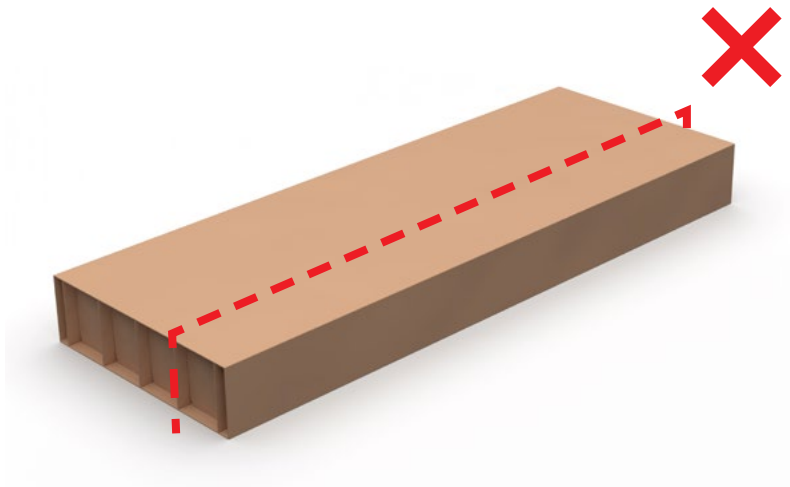
If vapor barrier is required, it should be placed over the SureCover Board or StormCover Sheet.



Step 8

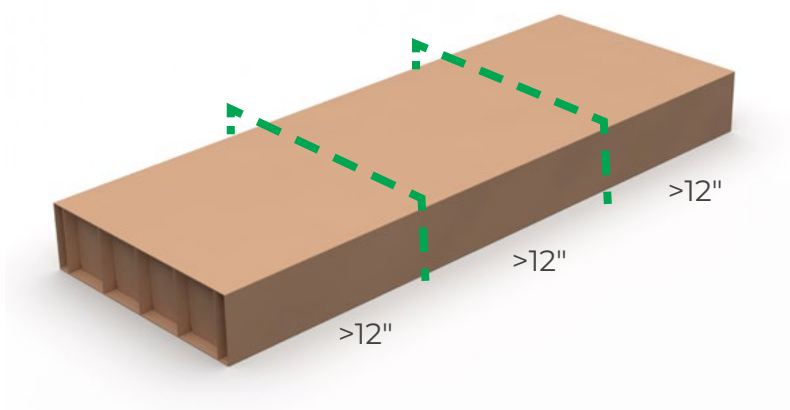
Install steel and pour concrete.

Installation Best Practices



Do not rip void forms.

Removal of the sidewall cover can allow concrete to penetrate into the void cavity.

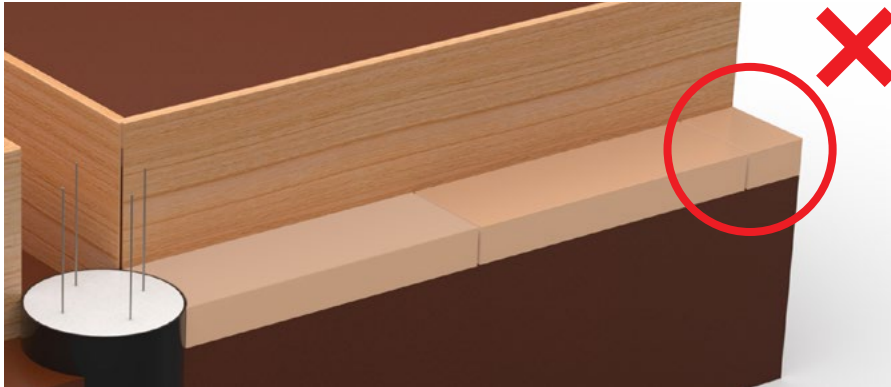


Cross-cut for shorter pieces.

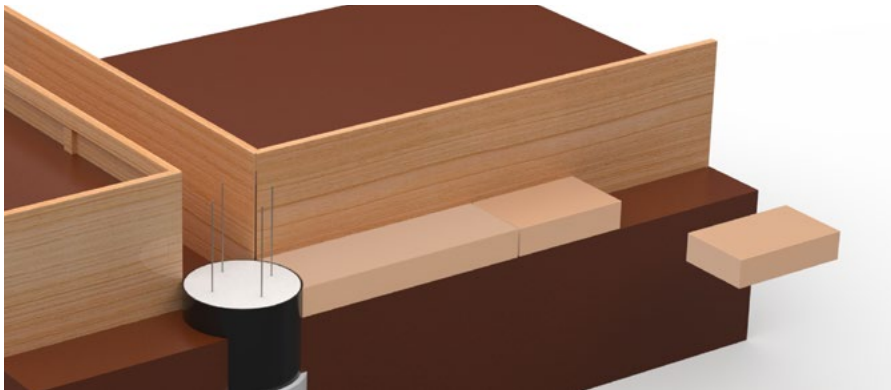
Use a handsaw or knife and rotate the cut pieces into position.

Turn them upside down for cutting. Sections need to be at least 12" in length to provide adequate interior support.

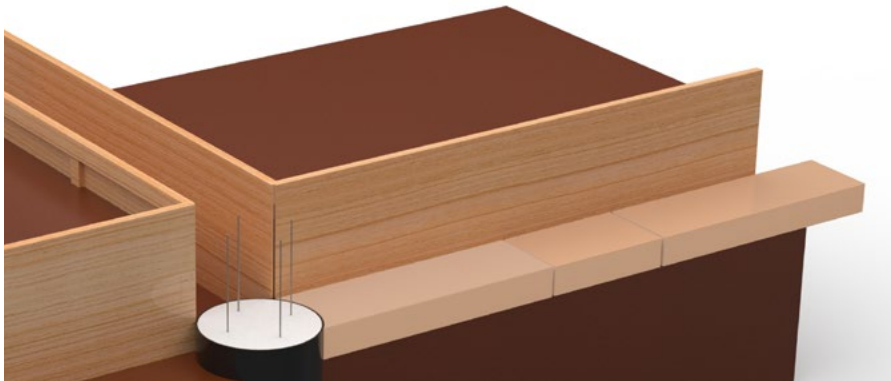
Installation Best Practices



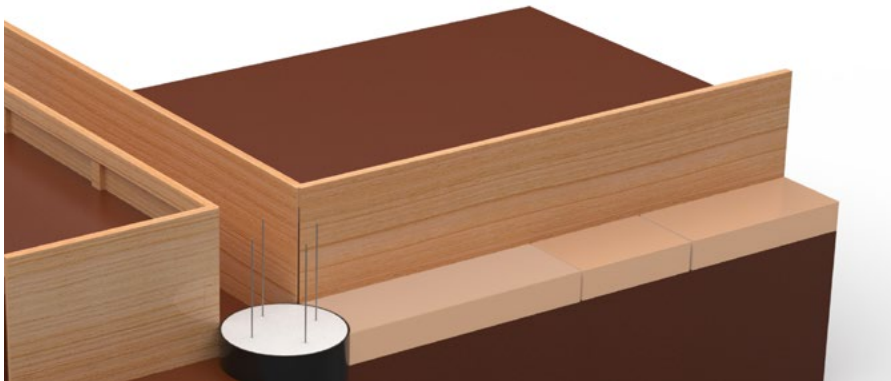
Do not fill areas with smaller void pieces less than 12" long.



Cut the adjacent piece in half, and remove the second half of the cut piece.



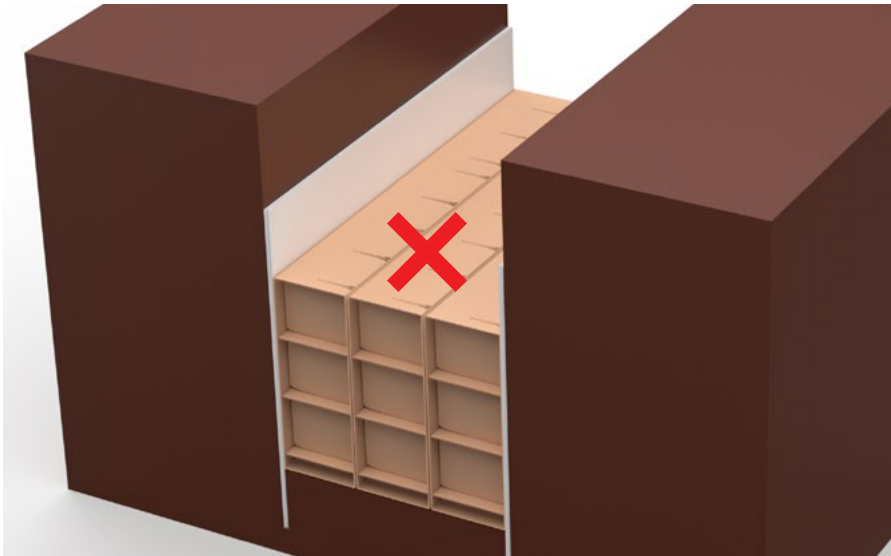
Place a full piece.



Cut the full piece to complete the run.

The two pieces not used in this run will be sufficiently long enough to use elsewhere.

Installation Best Practices



Do not install void forms on their sides for any reason

The interior supports must remain vertical to support concrete placement.



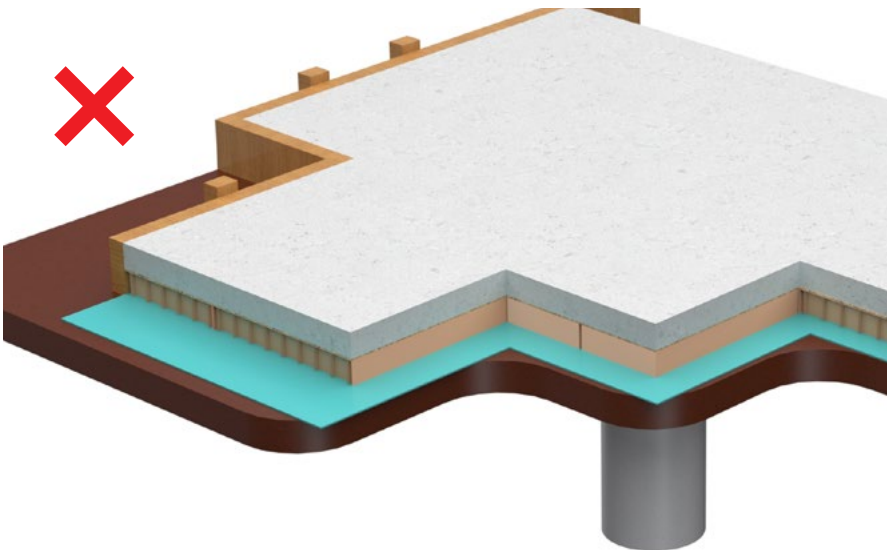
If the void form profile is square (same height and width), place with the stapled side down to ensure it is not installed improperly on its side.

Installation Best Practices



Provide adequate ventilation if storing the void forms beneath a tarp to ensure condensation does not occur.

Do not wrap void forms in plastic.



Do not install vapor barrier **below** void forms.



SUREVOID SYSTEM ONLY

If adequate moisture will not be absorbed into the void forms to initiate degradation in a timely manner, it may be desirable to manually introduce water into the void form area. Contact the engineer or manufacturer for available options.



Questions and Support

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Manufacturing Locations

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