# PITTSBURGH CORNING

# Thinline™ Track Spacer System for Thinline™ Series Glass Block

# **ASSEMBLY INSTRUCTIONS**





# Introduction

The Thinline™ Track Spacer System is the easiest way to install Pittsburgh Corning **Thinline**<sup>™</sup> **Series Glass Block**. No special skills or tools are required to create the project of your dreams. Now you have two options:

**Option 1** – Sealant joints for an all-glass, crystal-like appearance or;

**Option 2** — Grouted joints for a modular, mortar-like look.

**Thinline**<sup>™</sup> **Track Spacers** are available in  $31^{1}/2''$  length.

Thinline<sup>™</sup> Series Perimeter Channels are available in 48" or 96" lengths.

# 1. General Information

- Designed for use with Pittsburgh Corning Thinline<sup>™</sup> Series (3" thick) Glass Block only.
- Interior panels no larger than 85 sq. ft. framed on at least three sides with unfinished side no larger than 6 ft. Exterior panels must be no larger than 25 sq. ft. and framed on all four sides.
- All glass block panels are non-load bearing, so adequate provisions must be made for support of construction around the panel.
- Not for use in constructing curved glass block walls.

# 2. Tools Required

- Screwdriver, electric drill, fine tooth saw, caulking gun, utility knife, rubber mallet, tape measure, razor blade and a two foot level.
- Plus, for grouted joints only, you need a hard rubber float, trowel, soft rag and grout sponge.

# 3. Materials Required

• Pittsburgh Corning Glass Block Project Planner is available where glass block is sold or on our website at www.pittsburghcorning.com. This is a step by step guide you can use to determine the exact amount of materials required for your special project.

#### **Option 1** – Typical materials required for **Sealant Joints Installation include:**

- Pittsburgh Corning Thinline<sup>™</sup> Series Glass Block
- Thinline<sup>™</sup> Track Spacers
- Pittsburgh Corning Thinline<sup>™</sup> Series Perimeter Channels
- Pittsburgh Corning Glass Block Sealant
- #6 x 1" flat head galvanized screws (approx. 3 per lineal foot of perimeter channel)

#### **Option 2**-Typical materials required for **Grouted Joints Installation include:**

- Pittsburgh Corning Thinline<sup>™</sup> Series Glass Block
- Thinline<sup>™</sup> Track Spacers
- Pittsburgh Corning Thinline™ Series Perimeter Channels
- Pittsburgh Corning Glass Block Sealant
- #6 x 1" flat head galvanized screws (approx. 3 per lineal foot of perimeter channel)
- ProVantage® Glass Block Grout
- Grout Sealer

# 4. Prepare the Opening

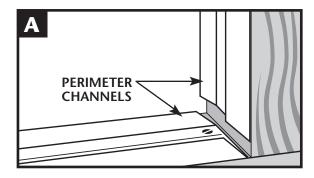
• Prepare the rough opening where the panel will be located. Make opening plumb and square to dimensions shown in Table 1.

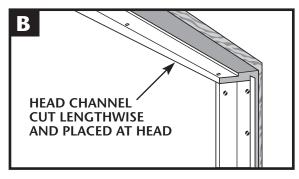
**TABLE 1. Thinline™ Series Glass Block** 

	Rough Opening Size (Inches)					
	Rough Opening Width			Rough Opening Height		
Number of Blocks	4" Wide Block	6" Wide Block	8" Wide Block	4" High Block	6" High Block	8" High Block
1	4 <sup>1</sup> / <sub>8</sub>	6 <sup>1</sup> / <sub>8</sub>	8 1/8	4 <sup>3</sup> / <sub>8</sub>	6 <sup>3</sup> / <sub>8</sub>	8 1/4
2	8	12	16	8 1/4	12 <sup>1</sup> / <sub>4</sub>	16 <sup>1</sup> / <sub>8</sub>
3	11 <sup>7</sup> / <sub>8</sub>	17 <sup>7</sup> / <sub>8</sub>	23 7/8	12 <sup>1</sup> / <sub>8</sub>	18 <sup>1</sup> / <sub>8</sub>	24
4	15 <sup>3</sup> / <sub>4</sub>	23 3/4	31 3/4	16	24	31 7/8
5	19 5/8	29 5/8	39 5/8	19 <sup>7</sup> / <sub>8</sub>	29 <sup>7</sup> / <sub>8</sub>	39 3/4
6	23 1/2	35 <sup>1</sup> / <sub>2</sub>	47 1/2	23 3/4	35 3/4	47 5/8
7	27 3/8	41 3/8	55 <sup>3</sup> / <sub>8</sub>	27 5/8	41 5/8	55 <sup>1</sup> / <sub>2</sub>
8	31 1/4	47 <sup>1</sup> / <sub>4</sub>	63 1/4	31 1/2	47 <sup>1</sup> / <sub>2</sub>	63 <sup>3</sup> / <sub>8</sub>
9	35 <sup>1</sup> / <sub>8</sub>	53 <sup>1</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>8</sub>	35 <sup>3</sup> / <sub>8</sub>	53 <sup>3</sup> / <sub>8</sub>	71 <sup>1</sup> / <sub>4</sub>
10	39	59	79	39 1/4	59 <sup>1</sup> / <sub>4</sub>	79 <sup>1</sup> / <sub>8</sub>
11	42 <sup>7</sup> / <sub>8</sub>	64 <sup>7</sup> / <sub>8</sub>	86 7/8	43 <sup>1</sup> / <sub>8</sub>	65 <sup>1</sup> / <sub>8</sub>	87
12	46 <sup>3</sup> / <sub>4</sub>	70 <sup>3</sup> / <sub>4</sub>	94 3/4	47	71	94 <sup>7</sup> / <sub>8</sub>
Note: Blocks are available in 4" x 8", 6" x 6", 6" x 8", and 8" x 8" sizes.						

• Cut the perimeter channels to length to fit the bottom top and both sides of this opening (Illus. A). These may be cut square or mitered. Apply two 1/4" beads of sealant on underside of channels horizontally 1/2" from both sides. Screw channels to the bottom and two sides of opening using the holes provided. Use two screws to fasten each end. If you cut off the predrilled holes when trimming the length, simply drill new ones at each end of the cut piece. Paint the screw heads white to reduce visibility.

• So that the last row of Pittsburgh Corning Glass Block units can be installed easily, cut the top perimeter channel in half lengthwise with a utility knife. Apply one bead of sealant. Install that half of the channel at the top of opening (Illus. B). On exterior applications, secure the exterior-side half of the channel with screws. The interior half of the channel will be sealed in place.



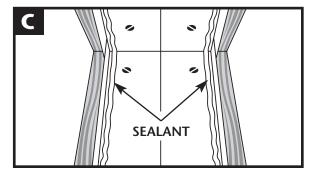


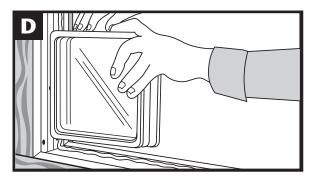
# 5. Cut Thinline™ Track Spacers to Length

- Cut the Thinline™ Track Spacers for each course to fit inside the vertical perimeter channels. Save the short pieces.
- For 8" block, the spacer is already scored at 7<sup>3</sup>/<sub>8</sub>" intervals for cutting the vertical spacers. Vertical spacers for use with 4" or 6" block, should be cut at 3<sup>3</sup>/<sub>8</sub>" or 5<sup>3</sup>/<sub>8</sub>" respectfully.

## 6. Assemble the Panel

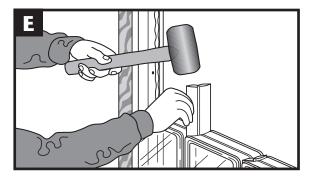
- Follow the instructions on the glass block sealant tube to open the tube. Coverage rate is one tube per twenty (20) blocks (adhere horizontal joints only). Cut the tip of the tube on a 45° angle at the 1/4" mark. The sealant skins over in 15-17 minutes. Do not apply sealant to more glass blocks than can be installed in 17 minutes.
- Apply beads of sealant on the interior corners of the sill channel
  the full length (Illus. C). Slide one block into the right jamb, and
  one into the left jamb (Illus. D). Install the remaining blocks in
  this row. As you install multiple rows, make sure to apply beads
  of sealant on the interior corners of the vertical side channels.

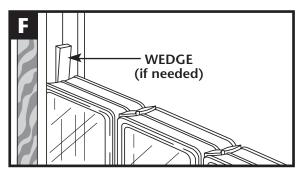


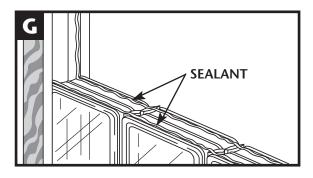


- Install vertical spacers between each of the glass blocks, you may need the rubber mallet to tap the last vertical spacer into position (Illus. E). Inspect each joint for alignment of the spacers. Align this row of blocks between both jambs, you may need to tap a wedge into the right or left jamb to center the row (remove the wedge). See Illus. F.
- Apply a <sup>1</sup>/<sub>4</sub>" bead of sealant on across the row of blocks behind the raised edge of the glass block face on both sides of the blocks (Illus. G).

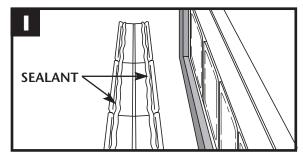
• Place the horizontal spacer on top of the first row of glass blocks (Illus. I). Remove any excess sealant. Adjust size of beads of sealant to prevent squeeze out (keep joint areas clean). If it's necessary to have a joint in the end of the horizontal spacer to extend it, cut the spacers so that the joint is under a vertical spacer. Stagger these horizontal joints from end to end on each proceeding row of glass blocks.



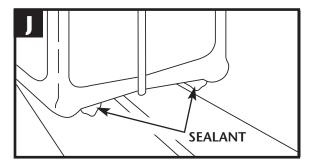






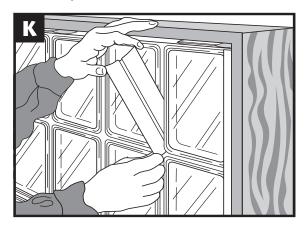


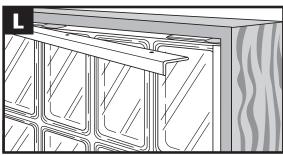
• Line up enough glass blocks to complete the next row. Apply two beads of sealant (Illus. I) and install these blocks sealant side down on horizontal spacer (Illus. J). Install vertical spacers and align the row with previous row.



- Repeat these same procedures for all rows, except the top row.
- Before installing these blocks apply a <sup>1</sup>/<sub>4</sub>" bead of sealant horizontally along the top inside leg of channel where the glass block face butts.
- Install the glass blocks then slide the vertical spacers in from the front of the glass block joints. The last spacer may need to be tapped in with a rubber mallet (Illus, K).

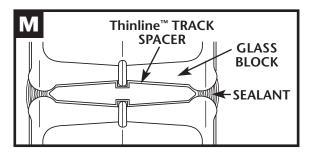
- Now that last row of blocks have been installed, slide short pieces cut from the Thinline™ Track spacers into the gap between top of blocks and half-channel previously installed, if space permits.
- Apply a <sup>1</sup>/<sub>4</sub>" bead of sealant horizontally across the top of the rough opening (<sup>1</sup>/<sub>2</sub>" from exposed edge).
- Then apply a 1/4" bead of sealant horizontally across the top inside edge of the other half of channel and slide it into place wedging it between the spacer and the top of the rough opening (Illus.L) (you may need a piece of tape to hold the channel in place until the sealant sets).

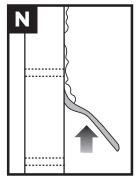




# 7. Seal The Joints Option 1 – Sealant Joints Finish:

 Follow APPLICATION instructions on the glass block sealant tube to open the tube. Coverage rate is one tube per sixteen (16) blocks. The sealant skins over in 15-17 minutes. Don't seal more joints than can be tooled in approximately 17 minutes. Practice the sealing technique before starting.







- Seal the horizontal joints first, pulling the tube through the joint. Slightly over fill the joint. See illustration (Illus. M).
- Use the spoon-shaped finishing tool and push it over the joints at an angle to collect the excess sealant and seal the joint. Periodically wipe the sealant from the joint finishing tool bowl (Illus. N & O).
- Remove any excess sealant from the block faces with the side of your finishing tool.
- Use the same method to fill the vertical joints. Carefully work the joint intersections to create a smooth finish.
   Repeat this procedure to seal the opposite side of the panel.
- Do not use the back of the finishing tool to smooth joints. This will only smear the sealant.
- Allow the sealant to cure 48 hours before putting any stress on the panel.
- For all exterior panels and panels exposed to water, run a bead of sealant between the perimeter channels and the face of the blocks. Also, between the perimeter channels and the framing. Use the joint finishing tool to seal these joints. Remove excess sealant.
- The piece of perimeter channel along the top (which was wedged in place earlier) must always have a bead of sealant applied between the channel and the frame.

- After 48-hours remove any excess sealant from the glass block faces with a razor blade.
- Clean channel surfaces and glass block faces with glass cleaner or soapy water. Do not use abrasive cleaners or steel wool which may damage the glass surface and sealant.
- Install surrounding wood or other trim, if desired.

#### **Option 2** – Grouted Joint Finish:

#### IMPORTANT: The ProVantage® Surface Grout was designed and tested for this application – DO NOT SUBSTITUTE!

- **Caution:** Avoid contact with skin. Safety glasses and impervious gloves are recommended to minimize skin and eye contact.
- This is a fast cure grout and should be applied and completely wiped down within 1 hour. Grout will cure very rapidly after this time period.
- Do <u>not</u> grout the perimeter joints between the blocks and the channels. These joints must be caulked after the grout has dried for a pliable watertight joint.
- Directions must be followed to the exact detail.
- Follow mixing instructions on ProVantage® Surface Grout. Grout coverage rate is 80 glass block units per 15 lb. bucket. Approximate ratio is: 3 cups grout to 1 cup water (grout should be mixed to a toothpaste-like consistency).
- Apply grout with a rubber float by pushing grout into all joints. Make sure to push grout in from multiple directions to assure joints are FULLY packed with grout. Be careful not to move the glass blocks while grouting, as the wall will still be a bit flexible prior to the grout curing completely. Movement may cause the grout to separate or squeeze out.
- Wipe down the glass block wall using a tile/grout sponge and a clean bucket of water. Always wipe down in a diagonal direction. This will prevent the grout from being wiped out of the joints. Make sure to rinse the sponge frequently, as it will quickly fill up with excess grout. Fully wring out all the water from the sponge prior to wiping.
- Wipe down should recur in multiple directions until all the grout is removed from the block surface, and joints are smooth.
- Let the glass block wall set for 15 minutes, then wipe it down again using a clean bucket of water.
- The grout will cure within four hours. At this point you can begin polishing glass blocks by wiping down with cheesecloth.

- After the grout is completely dry (approx. 4 hrs.), seal the perimeter joints between the blocks and the channels.
- Use a plastic spoon to take off and smooth out any excess sealant

#### **Grout Sealer**

- Wait four hours, then apply grout sealer to all grout joints. Immediately wipe off any excess sealer with a clean, dry cloth to prevent it from adhering to the glass block.
   For maximum protection it is recommended that you apply a second coat of sealer after first coat has dried.
- Install surrounding wood or other trim, if desired.

## **Maintenance**

An important part of the functional beauty of Pittsburgh Corning Glass Block products is that they are virtually maintenance free! There's nothing to rot, rust, peel or paint. All that is needed is an occasional wiping with a damp, soft cloth on interior panels or a hosing on exterior panels. With minimal attention, your Pittsburgh Corning Glass Block panel will remain sparkling and beautiful for years!

**Caution:** Shower applications—avoid cleaning procedures which may damage the joint sealant and cause water leakage through the joint.

### If You Need Assistance

We hope these instructions are clear and answer your questions about the installation of basic, straight Pittsburgh Corning Thinline™ Series Glass Block panels with the Thinline™ Track Spacer System. For additional information on Pittsburgh Corning Glass Block visit our website at **www.pittsburghcorning.com** or call **1-800-624-2120**.

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