



GLASS BLOCK SOLAR WALL TUBES Installation Instructions

SYSTEM DESCRIPTION: Knowledge of the following basic information is essential for proper design and installation of the Seves Glass Block Solar Wall Tubes.

- The intent of Solar Wall Tubes is to provide single (8" x 8") or at most double (8" x 16") glass block openings; in a stacked bond or running bond or random pattern; without a lintel or bond beam above each opening; within a multi-wythe wall; while addressing any open spaces within the walls' cavity.
- Requirements for supports above these openings within a running bond concrete masonry (CMU) wall, can be avoided by maintaining minimum distances, both horizontally and vertically, between Solar Wall Tubes, in accordance with the following:
 - For single (8" x 8") Solar Wall Tubes, maintain a minimum horizontal spacing distance of 24" to 32" from a running bond to a stacked bond configuration, respectively, and a minimum vertical spacing of 16" to 24" from a running bond to a stacked bond configuration, respectively.
 - For double (8" x 16") Solar Wall Tubes, maintain a minimum horizontal spacing distance of 40" to 48" from a running bond to a stacked bond configuration, respectively, and a minimum vertical spacing of 24" to 32" from a running bond to a stacked bond configuration, respectively.
- For stack bonded concrete masonry (CMU) walls or for tighter spacing of Solar Wall Tubes than recommended above, a lintel or bond beam will be required above such openings.
- Measurement of the depth of the Solar Wall Tube shall be considered to be the distance between the interior wall face and the exterior wall face of the multi-wythe wall. This measurement shall also coincide with the measurement between the exterior faces of the glass blocks at Solar Wall Tube ends. All Solar Wall Tubes shall be fabricated so that the exterior glass block faces shall be flush with the interior and exterior faces of the walls, unless otherwise specified at the time of ordering. Length of the protective steel tube shall be 1/2" shorter (1/4" at each end) than the designated Solar Wall Tube length, to accommodate placement of perimeter sealant.

SYSTEM EXECUTION: Although there may be other methods and/or sequences of construction, the following are Seves Glass Block's suggested installation recommendations. Further, the basis of these recommendations will be that the 8" x 16" CMU wall, in a running bond configuration, will be the first of the multi-wythe layers to be constructed.

- Design and install single (8" x 8") and double (8" x 16") Solar Wall Tubes within the existing coursing of the CMU wall without saw cutting across CMUs or mortar joints.
- Block off or leave open the designated locations within the CMU wall for the Solar Wall Tubes
- As subsequent layers are added to the multi-wythe wall, maintain the designated openings throughout the wall depth in a level and square and/or rectangular configuration.
- As the typical final brick veneer coursing is added, align the tops of the brick veneer with the bottom openings within the CMU walls to ensure the level placement of the Solar Wall Tubes.
- Before placement of the Solar Wall Tubes, make sure that the vented slot on the one side of the Tube will be situated on the bottom and towards the end of the exterior wall. Ideally, the vented slot will be positioned within the cavity space of the wall.
- Preferably from the exterior side, insert the Solar Wall Tubes into the CMU openings towards the interior side, then place and rest the exterior ends of the Tubes on top of the brick veneer. Mortar may be used between the Solar Wall Tubes and the masonry ends (CMU and brick veneer). Make absolutely sure that the perimeter spaces bonded by the exposed perimeter edges of the stainless steel tube and both faces of the interior and exterior walls are totally clean and free of mortar.
- While the middle of the multi-wythe wall is still accessible from the exterior side, it would be advisable to apply the Seves Glass Block sealant around the perimeter edge between the Solar Wall Tubes and the cavity side of the CMU walls.
- After the brick veneer walls have been built around and over the Solar Wall Tubes, apply Seves Glass Block Sealant around the resulting perimeter joints of the Solar Wall Tubes and both the exterior veneer and interior walls. When completed, the glass block faces at both ends of the Solar Wall Tubes shall be flush with their respective walls. The perimeter sealant joints will also be flush with their respective walls and be placed in front of the exposed stainless steel tubes.
- As a final step, clean off any mortar and sealant on the glass block faces.