

Remodeling & Resurfacing Deck Instructions

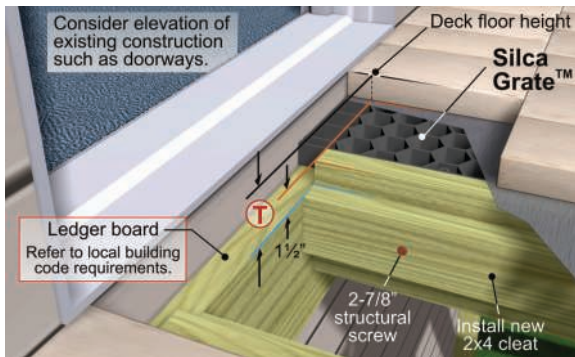
1. Remove all horizontal flooring (5/4 treated lumber, composite lumber, etc) from existing deck.

RECOMMENDATION: Framing and footing should be inspected by a qualified building official to make sure they are in line with all state and local codes.

2. If you have sufficient threshold height, you may screw the Silca Grate™ on top of your floor joists. Be sure to consider the stack height and desired finish floor height. (See second illustration in the New Deck Construction Instructions.)

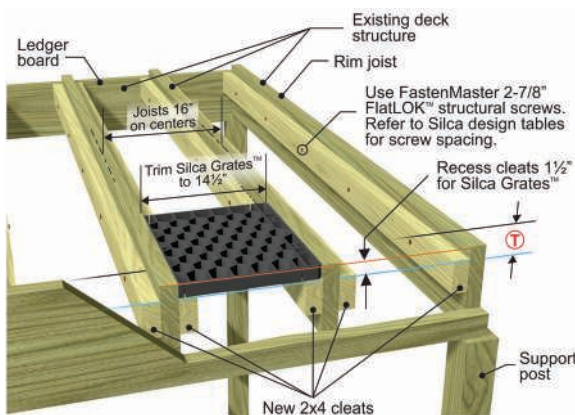
3. If you do not have ample threshold height, you must add a 2x4 cleat on each side of the floor joist.

NOTE: Maintain correct height while fastening on joist.

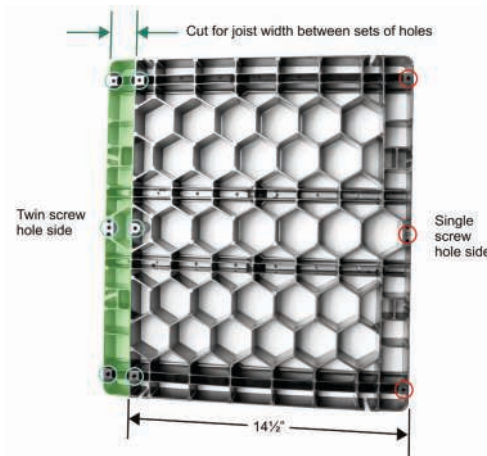


4. Trim 1 1/2" off the Silca Grate™. Inlay Silca Grate™ on top of 2x4 cleat.

NOTE: Deck construction must be in compliance with your state and local codes. Refer to Table 2 at the end of this section. ICC-ES ESR# 3748 Verifies that Silca Grate™ Meets Code Requirements.



4. (Cont'd.) NOTE: Silca Grate™ has two sets of screw holes on one side of the Silca Grate™. Trim the side with two holes.



5. Screw Silca Grates™ in place.

6. Install Geotextile/landscape blanket. Same as Step 4 in the New Construction section.

7. Treated Lumber Border. Same as Step 5 in the New Construction section but do not include the height of the Silca Grate™.

8. Congratulations on finishing your new remodeled deck, complete with Silca®-supported outdoor paver flooring! To finish, you may cover the exterior fascia edging with aluminum, vinyl, cedar, composite, or treated lumber.

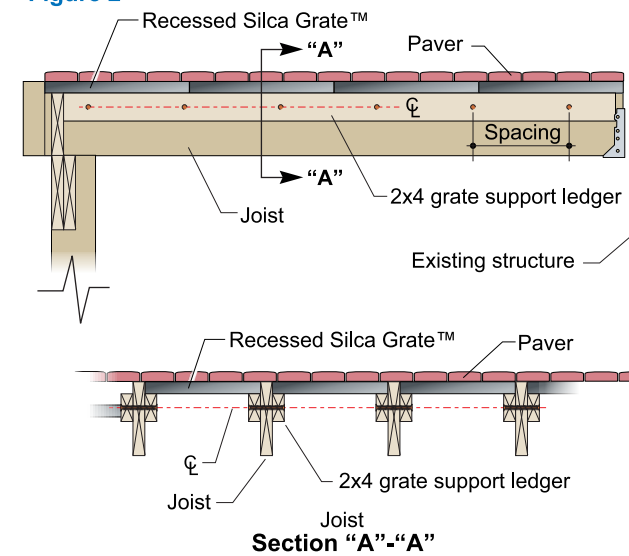
Silca Grate™ Support Ledger Attachment for Retro-Fit Application

Table lists screw spacing in inches to attach 2x4 ledger to each face of existing joist.

	3/4"	1-1/4"	2"	2-1/2"	3"
Screw spacing	18"	16"	14"	13"	12"

1. Screws are FastenMaster HedLok or TrussLok-Z 2-7/8" long screws, single row, thru ledger centerline (C).
2. Joists are 16" o/c spacing.
3. Joists and ledger are Southern Pine, No. 2 grade, wet service.
4. Pavers or stone over Silca Grate™ structural subfloor system, grate figured at 2psf dead load.
5. Live load = 40psf.
6. Paver or stone dead loads based on material weight of 150 pcf.
7. Deflection criteria: Live Load = L/360, Dead Load L/240.

Figure 2



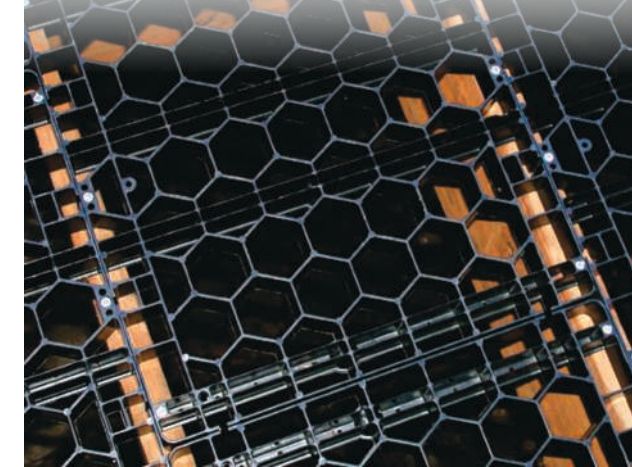
ICC-ES ESR# 3748 Verifies that Silca Grate™ Meets Code Requirements



356 East Maryland Avenue Sebring, Ohio 44672



Installation Guide for Silca Grate™



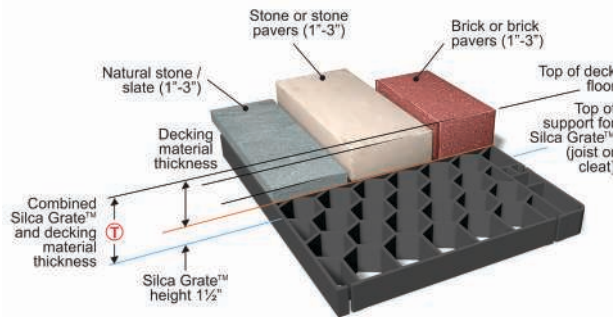
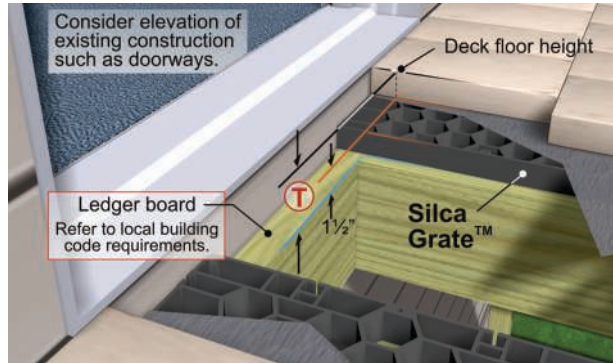
Transforming Wood Decks to StoneDeks™

New Deck Construction Instructions

1. Determine the desired elevation of your finished deck floor.

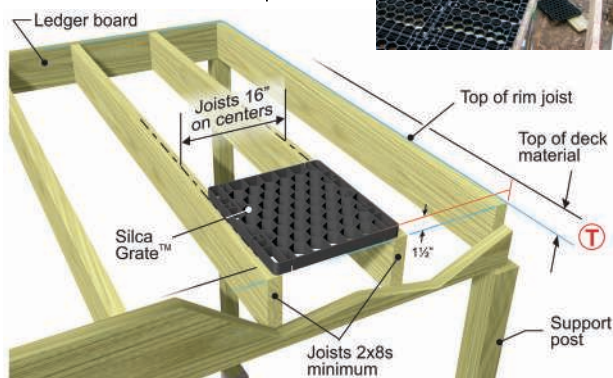
There are several important factors to consider during this step, including doorway features and the thickness of your planned outdoor paver floor materials (i.e. natural stone or brick pavers).

NOTE: The Silca Grate™ is 1-1/2 inches thick.



2. Build your substructure up to the necessary height with 16 inch on-center floor joists.

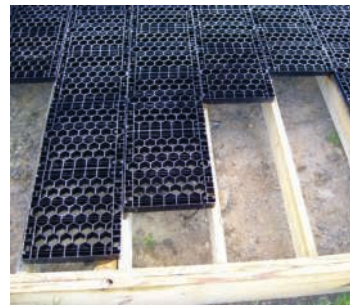
NOTE: Deck construction must be in compliance with your state and local codes. Refer to Table 1 at the end of this section. ICC-ES ESR# 3748 Verifies that Silca Grate™ Meets Code Requirements.



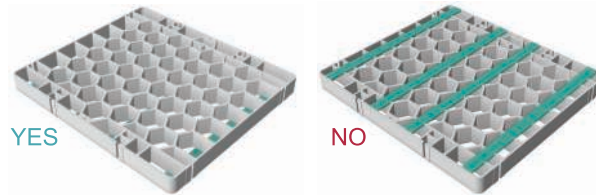
3. Screw down the Silca Grates™ to the floor joists using four #9 3" deck screws per grate.



It is recommended that the Silca Grates™ be staggered to achieve maximum strength and stability. To accomplish this start one row of Silca Grates™ with a full grate, and start the next with a half grate.



Be sure that the Silca Grate's™ reinforcement straps are on the bottom side, in contact with the floor joists.



4. Install Geotextile/landscape blanket (this step is only needed if plan to use Polymeric sand between the joints of your bricks or pavers).



5. Treated Lumber Border – Use a wider dimension lumber for your rim joist (i.e. Use 2x12 for rim joists if your standard joists are 2x8). Generally, you will want the width of the rim joist to be greater than the width of the standard joist by at least the same amount as the combined height of your pavers and Silca Grate™.



6. Install your new outdoor paver floor.



7. Congratulations on finishing your new deck, complete with Silca®-supported outdoor paver flooring! To finish, you may cover the exterior fascial edging with aluminum, vinyl, cedar, composite, or treated lumber.



Table to determine deck component sizes

Use Table 1 directly below to determine the required joist size based on the chosen paver thickness and the span (or length "L") of your deck joists - see Figure 1 below the Table.

Maximum Joist spans "L"
when using pavers 3/4" to 3" thickness

Joist size	3/4"	1-1/4"	2"	2-1/2"	3"
2x6	8'-9"	8'-5"	7'-10"	7'-5"	7'-2"
2x8	11'-4"	10'-9"	10'-0"	9'-6"	9'-2"
2x10	13'-7"	12'-10"	11'-11"	11'-4"	10'-11"
2x12	16'-0"	15'-2"	14'-1"	13'-4"	12'-10"

- Joists are 16" o/c spacing.
- Joists are Southern Pine, No. 2 grade, wet service.
- Pavers or stone over Silca Grate™ structural subfloor system, Grate figured at 2psf dead load.
- Live load = 40psf.
- Paver or stone dead loads based on material weight of 150 pcf.
- Deflection criteria: Live Load = L/360, Dead Load = L/240.
- Joists may be cantilevered up to 12".

Figure 1

