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Silca System LLC
dba StoneDeks System
14600 Commerce Street NE
Alliance, Ohio 44601

Attn: Michael Duriga
(330) 821-1585

RESEARCH REPORT: RR 26201
(CSI 06.53.00)

Expires: April 01, 2022
Issued Date: April 01, 2021
Code: 2020 LABC

GENERAL APPROVAL – SilcaGrate™ subfloor panels.

DETAILS

SilcaGrate™ is a weather-resistant plastic grate designed for installation on wood deck framing to support finished deck surface materials such as cut stone or precast pavers.

SilcaGrate™ is an injection molded honeycomb grate nominally 16 inches by 18 inches and 1.5 inches tall. Each grate has a series of holes for fastening to deck framing and stringers. For stair tread applications, the SilcaGrate™ is field cut from one edge down to 16 inches by 11 inches.

SilcaGrate™ has been evaluated for the following uses:

Exterior deck subfloor on exterior decks, balconies, porches walkways and stair tread.

Use in One- and Two-Family Dwellings regulated by the LARC and other construction types regulated by the LABC Section 705.2.3 Combustible projections where fire-resistance rated floor construction is not required for the deck or balcony.

SilcaGrate™ has been evaluated for the following properties:

1. Structural performance: SilcaGrate™ subfloor panels are rated for a Span/Load Rating of 16/100 (16.0 in. Span and 100 psf Live Load) installed on support framing spaced 16 inches on center. When used to support stair treads, SilcaGrate™ are rated for the code-prescribed concentrated load equal to 300 lbs. when supported on all four sides. See **Table 1** for Span/Load Ratings.

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2. Temperature durability: Structural performance has been demonstrated for a temperature range from -20 °F to 125 °F.
3. Surface Burning: SilcaGrate™ panels have a flame spread index of less than 200 when tested in accordance with ASTM E84.
4. Decay Resistance and Termite Resistance: SilcaGrate™ may be used where the code requires preservative treated or naturally durable wood for resistance to weathering effect, attack from termites, and fungus decay.

The approval is subject to the following conditions:

1. SilcaGrate™ subfloor panels must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. In the event of a conflict, this report governs. A copy of the manufacturer's instructions must be available on the jobsite during installation.
2. Dead load of finished deck coverings placed on the installed SilcaGrate™ subfloor panels shall not exceed 30 psf as shown in *Table 1*. The deck covering is not within the scope of this evaluation.
3. SilcaGrate™ subfloor panels shall be fastened to wood deck framing spaced 16 inches with #9 x 3-inch corrosion resistance screws located in the screw holes at each corner of the grate.
4. Compatibility fasteners with the supporting construction materials including chemically treated wood are outside the scope of this evaluation and subject to approval by the code official.
5. Installation of deck coverings and wind uplift resistance is outside the scope of this report. Evaluation of wind loads and uplift resistance shall be made by a California licensed engineer or architect and submitted to structural plan check for review and approval.
6. Where required by structural plan check, engineering calculations and details shall be provided. The documentation shall verify that the installation complies with this report and the applicable building code for the type of framing and condition of the supporting construction.
7. SilcaGrate™ is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

Table 1 – Span / Load Ratings

Span / Load Ratings ⁽¹⁾		Maximum Stair Tread Span ⁽²⁾	Fastener
Live Load	Max. Dead Load		
16"/100 psf	30 psf	16" Span	Four (4) #9 x 3 inch corrosion resistant screws

(1) Span/Load rating is the maximum span in inches and the maximum allowable live load in pounds per square feet (psf). The maximum allowable loads indicated include applicable end use factors. No additional adjustments should be taken. ⁽²⁾SilcaGrate™ for stair tread applications is field cut from one edge to 16" by 11" and Span/Load is based on continuous support along all four sides.

DISCUSSION

The report is in compliance with the 2020 Los Angeles City Building Code.

The approval is based on the Intertek CCRR-0366 and test reports filed with the Building Research Section. The allowable loads referenced in this general approval are based on a factor of safety of 2.5.

Reports of testing are in accordance with ICC-ES AC174, Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails), dated January 2012, editorially revised Dec. 2014.

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

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 RR24735
 R01/01/2021
 TLB2000231
 1805

Attachment: GRATE DIAGRAMS (3 pages)

APPLICATION DETAILS - NEW CONSTRUCTION ELEVATION VIEWS



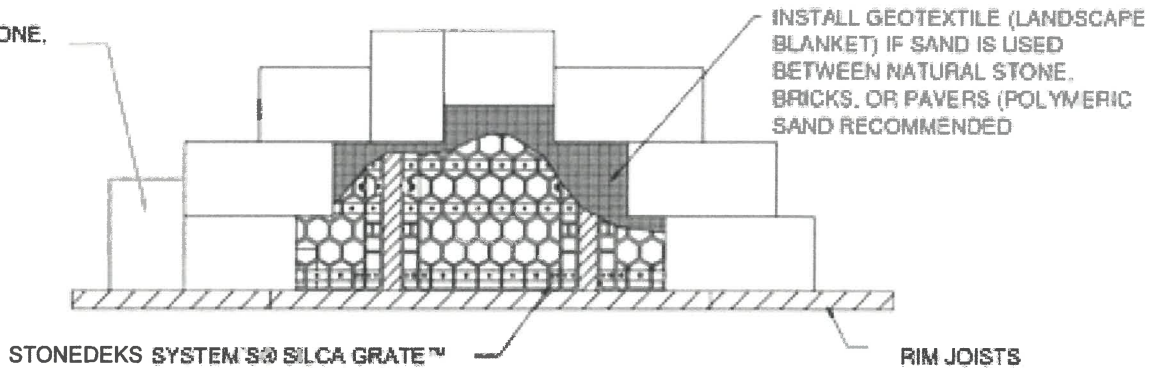
STONEDEKS SYSTEM

14600 Commerce St. Alliance, Ohio 44601

Phone: (330) 821-1585

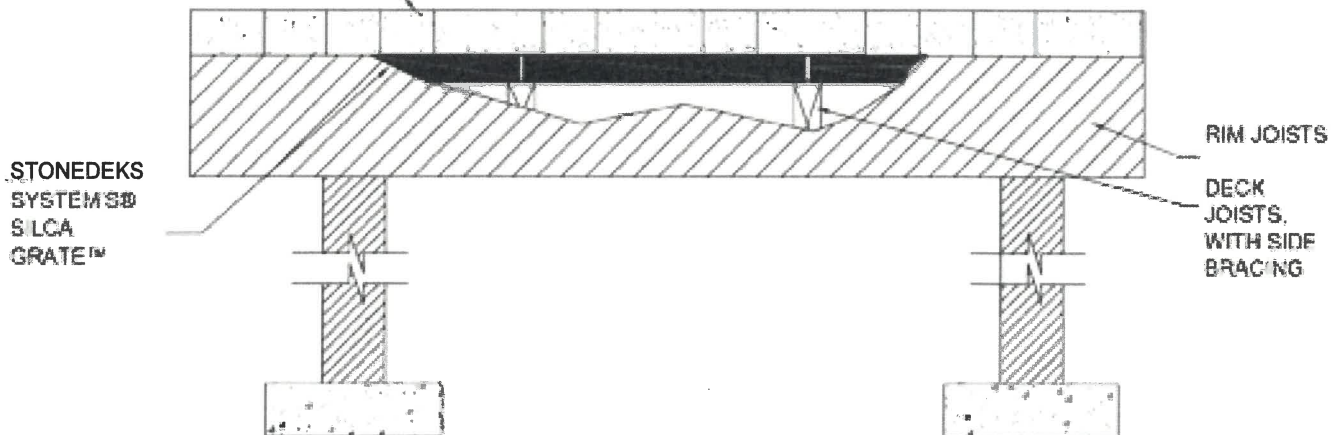
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CHOICE OF NATURAL STONE, BRICK, PAVERS AND CONVENTIONAL AND ENGINEERED FLOORING PRODUCTS



PLAN VIEW

CHOICE OF NATURAL STONE, BRICK, PAVERS AND CONVENTIONAL AND ENGINEERED FLOORING PRODUCTS

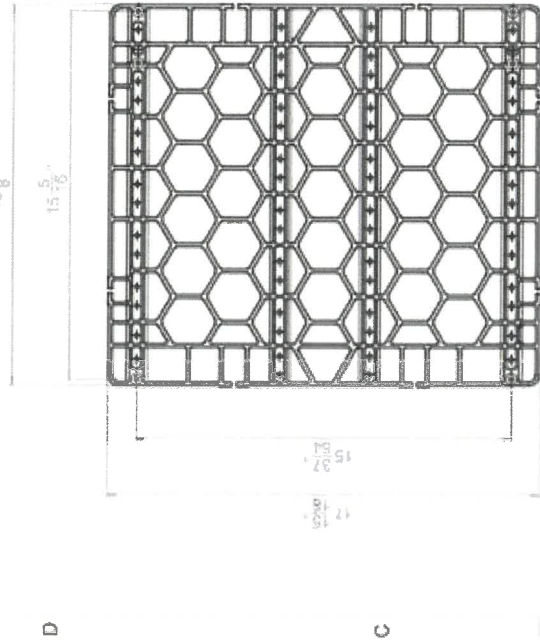


FRONT ELEVATION

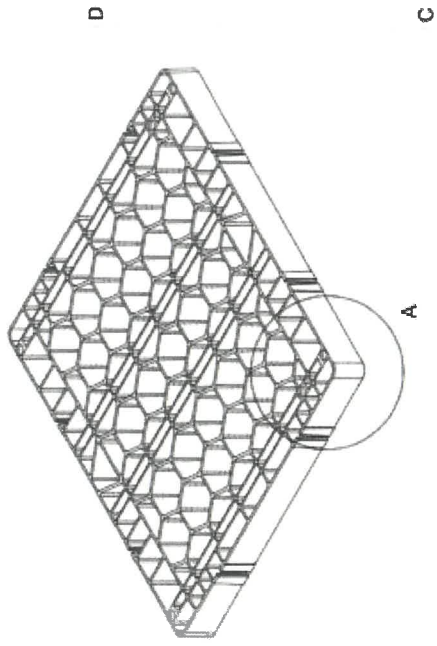
NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION
4. FOR PRODUCT AND COMPANY INFORMATION VISIT WWW.STONEDEKS.COM OR CALL 330-821-1585

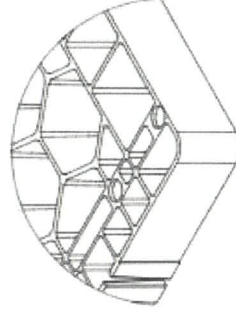
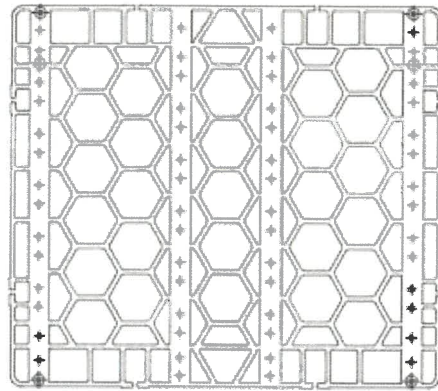
TOP VIEW



SIDE VIEW



BOTTOM VIEW



DETAIL A



STONEDEKS SYSTEM
 STONEDEKS SYSTEM
 14600 Commerce St. Alliance, Ohio 44601
 Phone: (330) 821-1585
 www.StoneDecks.com

StoneDecks - Revised 2/2018

Part Name	Material	Quantity	Notes
Grate Panel	Aluminum	1	SEE DRAWING FOR DIMENSIONS
Grate Panel	Aluminum	2	SEE DRAWING FOR DIMENSIONS

1 2 3 4 5 6 7 8

D C

B

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