Kinetics Noise Control, Inc.
6300 Irelan Place
Dublin, OH 43017-0655

Attn: Greg Hively
(614) 889-0480

RESEARCH REPORT: RR 25397
(CSI #13080)

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Code: 2017 LABC

GENERAL APPROVAL – Renewal - Sound Rated Floor-Ceiling Assemblies Using Kinetics Soundmatt, SR Floorboard, and Kinetics Isolation Pads (Also Referred to as Kip Pads).

DETAILS

1. Combustible sound rated assembly with parquet flooring and wood joists:

   ⅝-inch gypsum drywall installed perpendicular to resilient furring channels. Resilient channels attached 24-inches on center to 2 x 12 wood joists, 4-inch mineral fiber batts supported between joists and located 2-inches above bottom of joist. Wood Joists supporting the following: Single layer ⅝-inch Tongue and Groove plywood installed perpendicular to wood joists, 15-lb roofing felt, 1-inch thick Dura Cap gypsum concrete installed per manufacturer's instructions, Kinetics 5/16-inch soundmatt sheets with edges butted together, base layer of ⅜-inch plywood laid directly over the soundmatt, face layer of ⅜-inch plywood glued to base layer and screwed with ⅝-inch wood screws at each corner and at 12-inches on center (face layer laid perpendicular to base layer), 5/16-inch parquet flooring per manufacturer's instructions.

2. Combustible sound rated assembly with parquet flooring and wood joists:

   Assembly is the same as description "a" above except Kinetics ⅝-inch SR Floorboard is used in place of the 5/16-inch soundmatt.

3. Combustible sound rated assembly with parquet flooring and wood joists:
⅝-inch gypsum drywall installed perpendicular to resilient furring channels. Resilient channels attached 24-inches on center to 2 x 12 wood joists, 4-inch mineral fiber batts supported between joists and located 2-inches above bottom of joist. Wood Joists supporting the following: Single layer ⅝-inch Tongue and Groove plywood installed perpendicular to wood joists, 15-lb roofing felt Kinetics 5/16-inch soundmatt sheets with edges butted together, ½-inch wonderboard installed per manufacturer's instructions. 2-inch wide fiber glass tape attached with latex cement slurry at all wonderboard joints and latex cement used to fill in gap between wonderboard sheets. ¼-inch thick ceramic tile installed over wonderboard sheets per manufacturer's instructions.

4. Sound rated assembly with ceramic tile over concrete slab:
Minimum 6-inch thick concrete slab, Kinetics 5/16-inch soundmatt sheets with edges butted together, ½-inch wonderboard installed per manufacturer's instructions. 2-inch wide fiber glass tape attached with latex cement slurry at all wonderboard joints and latex cement used to fill in gap between wonderboard sheets. ¼-inch thick ceramic tile installed over wonderboard sheets per manufacturer's instructions.

5. Combustible sound rated assembly with ceramic tile over precast or poured in place concrete slab:
8-inch thick Flexicore model 824A-D-22 or a precast or poured in place concrete slab of equivalent cross section with perimeter and intermediate joints sealed with dense mastic material, 15-lb roofing felt, Kinetics ⅝-inch thick SR Floorboard, ½-inch thick layer of portland cement and sand mixture combined with wire mesh reinforcement to form a mortar bed, ⅜-inch thick ceramic tile.

6. Combustible sound rated assembly with ceramic tile over precast concrete or poured in place slab:
8-inch thick Flexicore model 824A-D-22 or a precast or poured in place concrete slab of equivalent cross section with perimeter and intermediate joints sealed with dense mastic material, 15-lb roofing felt, Kinetics ⅝-inch thick SR Floorboard, ½-inch Wonderboard, ½-inch thick ceramic tile.

7. Combustible sound rated assembly with concrete T-beams and concrete finish floor:
48-inch wide concrete T-beams (with projecting legs spaced 24-inches apart), 2-inch thick 3,000 psi normal weight topping slab, floating support system joined with clips and laid over entire surface, double layer of polyethylene plastic, and 4-inch thick 3000 psi normal weight concrete with wire mesh.
The floating support system consists of ½-inch thick plywood, KIP isolation pads with density and spacing selected to obtain an installed natural frequency of 15 4z or less, and 2-inch thick 1.3 pcf glass fiber insulation.
The combustible sound rated floor-ceiling assemblies specified above are approved with STC and IIC sound ratings exceeding 50.

The approval is subject to the following conditions:

1. The Floor/ceiling assemblies shall be constructed as described above and as shown on the attached detail sheets.

2. The precast concrete slab specified in paragraphs 5 and 6 above shall be the Flexicore model 824A-D-22 or a precast or poured in place concrete slab of equivalent cross section. The precast concrete slab shall be one that which is approved by a current Los Angeles City Research Report (LARR).

3. Detailed plans shall show how the "floating floor" as described in paragraph 'g' above is restrained to prevent movement due to seismic forces.

4. The floor-ceiling assembly shall be designed by a California licensed civil or structural engineer or architect.

DISCUSSION

The report is in compliance with the 2017 Los Angeles City Building Code.

The approval is based on sound tests conducted in accordance with ASTM E492, E989, E413, and E90.

The Kinetics ⅝ SR Floorboard is a composite of high density molded glass fibers separated by a rigid phenolic-treated honeycomb core and is considered a combustible material.

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.

This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this approval have been met in the project in which it is to be used.

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QUAN NGHIEM, Chief
Engineering Research Section
201 N. Figueroa St., Room 880
Los Angeles, CA 90012
Phone- 213-202-9812
Fax- 213-202-9943

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