KB Racking
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RESEARCH REPORT: RR 26132-T
(CSI # 00 00 00)

REEVALUATION DUE
DATE: May 1, 2019
Issued Date: May 1, 2018
Code: 2017 LABC

GENERAL APPROVAL – General Approval – KB Racking Flat-Roof Solar PV Racking Systems: Coefficient of friction between roof protection mats and various roof materials.

DETAILS

This approval details the coefficients of friction tests and results determined between KB Racking's Flat-Roof Solar PV Racking Systems protection mats and various roofing materials. Testing has been performed by an LA City approved test agency conforming to the applicable requirements of ASTM G115/ASTM D1894.

The protection mats are fabricated from cured synthetic rubber and polyurethane polymer.

The approval is subject to the following conditions:

1. The friction coefficients are approved for use with the specified roof materials in contact with KB Racking roof protection mats only. All other racking system properties not expressly referenced herein are beyond the scope of this approval.

2. The friction coefficient values for each roof material tested in contact with the KB Racking roof protection mats are on file with the Engineering Research Section.

3. In the case where multiple roofing materials are present within a flat roof solar PV array, then the worst-case coefficient of friction shall apply.

4. KB Racking Flat Roof Solar PV Racking Systems must be installed in accordance with the manufacturer's installation instructions. The design and installation of KB Racking system components is beyond the scope of this general approval.

5. Plans and details of KB Racking Systems must be approved by the Structural Plan Check Division of the City of Los Angeles, Department of Building and Safety.

6. Structural calculations for site specific loading conditions must be submitted to the Structural Plan Check Division for approval. Calculations must be completed by a licensed civil or structural engineer registered in the State of California.

7. Rubber mats are manufactured by National Rubber Technologies at 35 Cawthra Avenue, Toronto, ON M6N 5B3.

8. The protection mats shall be identified with the following information:

    a. Manufacturer name (National Rubber Technologies
    b. Product name and type
    c. LARR No. 26132

DISCUSSION

The rubber mats are approved on a temporary basis. Test results shall be submitted to the Engineering Research Section to demonstrate the effects of aging on the coefficient of friction of the rubber mats. Test results shall be submittal after years 1, 3 and 5 from the date of original approval, May 2018, coinciding with application for renewal of the general approval.

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

The approval is based on coefficient of friction tests per test report (*2016-1568 COF Test Report on Roofing Materials (CA*).

The follow descriptions are typical of each material tested:

Material	Description
Standard Rubber Mat	Polymeric recycled rubber sheet.
Polyvinyl Chloride (PVC)	Relatively smooth, flexible, thermoplastic membrane.
River Rock	Pea gravel distributed evenly and level over the roof surface.
Reflective Coating	Rubberized coating applied using spray, roll or brush.
Mineral Cap Sheet	Consists of a granule shingle type material.
Thermoplastic Polyolefin (TPO)	Relatively smooth, flexible, polymerized thermoplastic rubber.
Ketone Ethylene Ester (KEE)	Soft flexible thermoplastic material.
Ethylene Propylene Diene Monomer (EPDM)	Synthetic rubber roofing membrane.
Spray Polyurethane Foam (SPF)	Insulating plastic sprayed on in liquid form, expanding and hardening to relatively bumpy texture.
Aluminum	Metallic roofing.

Test reports, details and other pertinent data are on file at the Engineering Research Section, Los Angeles Department of Building and Safety.

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 the Department of Building and Safety Engineers and Inspectors.

This general approval of an equivalent alternate of 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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