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Hannibal Industries, Inc.
3851 S. Santa Fe Ave
Los Angeles, CA 90058

Attn: Carlos Rosillo
(323) 496-5742

RESEARCH REPORT: RR 25534
(CSI 10670)

Expires: January 1, 2020
Issued Date: December 1, 2017
Code: 2017 LABC

GENERAL APPROVAL – Renewal - Andersen/Hannibal Rack Series Rivet connectors and steel materials for storage racks

DETAILS

Andersen/Hannibal Rack Series rivet connectors consist of three or four rivets attached to an angle clip welded to a channel-beam. The rivets, which have the heads projecting 0.15" from the inside face of the angle, can be fitted through preformed slots of a channel-column. A built-in spring lock on the angle prevents the disengagement of the connected assembly. See attached drawings for details.

The approval is subject to the following:

1. The steel materials for the components shall conform to the following specifications:
 - a. ASTM A570 M-96 Grade 50 for the columns.
 - b. ASTM A570 M-96 Grade 50 for the beams and connectors.
 - c. ASTM A576-90B (Re-approved 1995) fine grain, hot-wrought carbon steel UNS G10100 Grace C-1010 for the rivets.
2. Test data by the mill or by a Los Angeles City approved testing agency shall verify the materials for each shipment. The data shall be kept on file and submitted to the Department upon request.
3. Structural design of the racks shall be in accordance with Section 2209 of the 2017 Los Angeles Building Code. When designed in accordance with the Specification for the

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Design, Testing and Utilization of Industrial Steel Storage Racks, MH16.1:2008, the beam column rotation capacity shall be determined in accordance with Section 2.6.4 of the Specification. Calculations shall be provided to the Structural Plan Check Section for each project.

4. Design values for the connection shall not exceed those shown in the attached Connection Capacities Table.
5. Minimum beam to connector weld to be full beam height at front face of beam and beam ht. less step depth at rear face of beam as shown on attached sheets.
6. All materials for exterior use shall be galvanized.
7. All welding shall be performed by a Los Angeles City Department of Building and Safety approved fabricator.
8. All welds and structural components shall be checked for adequacy by a California registered civil or structural engineer.
9. All fabrication of structural steel furnished to a specified minimum yield point greater than 36 ksi shall be in the shop of a Los Angeles City Department of Building and Safety approved Type I Fabricator and shall be in accordance with the provisions of Information Bulletin P/BC 2014-32, "Supplementary Rules and Regulations Governing Fabricators of High-Strength Structural Steel".
10. The materials approved by this report shall be fabricated by Andersen Rack System, Inc. in their plant located at:

Andersen Rack Systems, Inc. Hannibal Material Handling
1821 E. Charter Way 2230 E. 38th Street
Stockton, CA 95205 Vernon, CA 90058
L. A. City Fabricator Lic#1626, L.A. City Fabricator Lic# 19799
Phone (209) 948-8023 Phone (323) 587-4060
Fax (209) 948-4061 Fax (323) 587-4061

DISCUSSION

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

Andersen Rack and Hannibal Material Handling merge into Hannibal Material Handling, Inc.

The approval is based on tests and analyses.

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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.

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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Attachments: Sheets of Connection Capacities Table (1 sheet) and Details (9 sheets)