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EXECUTIVE OFFICER

Carboline Company  
350 Hanley Industrial Court  
St. Louis, MO 63144

RESEARCH REPORT: RR 25484

Attn: Ed Taylor  
(314) 644-1000 x 2323

Expires: May 01, 2020  
Issued Date: May 01, 2018  
Code: 2017 LABC

**GENERAL APPROVAL** – Renewal and Clerical Modification - Thermo-Lag 3000 Subliming Material, Thermo-Sorb, Thermo-Sorb VOC, Thermo-Lag E100 Fire Resistive Coating for Structural Steel.

## DETAILS

**Thermo-Lag 3000** is a subliming, fire resistive material which expands when subject to intense heat, providing up to 3 hours of fire protection. The Thermo-Lag 3000 has a flame spread index and smoke developed index of 0 and 5 respectively.

**Thermo-Sorb** is a subliming/intumescent, thin film, fire resistive coating which is spray applied directly to primed steel surfaces providing up to 3 hours of fire protection.

**Thermo-Sorb VOC** is a thin film intumescent coating designed up to a 3 hour fire rating for use on interior steel beams, columns, tubes, and pipes.

**Thermo-Sorb** and **Thermo-Sorb VOC** has a flame spread index and smoke developed index of 0 and 0 respectively.

**Thermo-Lag E100** is an epoxy intumescent fireproofing used for commercial and light industrial applications. It is designed to provide up to 3 hour cellulosic fire protection for structural steel beams, I-section columns, tubular columns and pipes without reinforcing mesh for both exterior and interior applications. Thermo-Lag E100 has a flame spread index and smoke developed index of 5 and 65 respectively.

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RE: Thermo-Lag 3000 Subliming Material, Thermo-Sorb, Thermo-Sorb VOC, Thermo-Lag E100 Fire Resistive Coating for Structural Steel.

**The approval is subject to the following conditions:**

1. Fire-resistive materials shall be delivered to the job site in sealed containers identified by the products name.
2. All surfaces to which the product will be applied shall be free of dust, dirt, oil, scale, grease or loose paint.
3. Special inspection is required.
4. Application shall be done by trained applicators accepted by Carboline Co.
5. Application of the fire-resistive material shall be in accordance with the manufacturer's instructions, a copy of which shall be available at the job site.
6. Thermo-Lag 3000 is approved for exterior and interior use.
7. Thermo-Sorb and Thermo-Sorb VOC is approved for interior general purpose (with top coat) and for conditioned space purpose (without top coat).
8. Thermo-Lag 3000 shall be designed and installed in accordance with Omega Point Design No. C301, B303, C304.
9. Thermo-Sorb and Thermo-Sorb VOC shall be designed and installed in accordance with UL Design No. N 619, X 660, X 661, X 662, D 946.
10. Thermo-Lag E100 shall be designed and installed in accordance with Intertek Listing CC/IF 180-01, CC/IF 180-02, CC/IF 180-03.

**DISCUSSION**

The clerical modification is to update the report to the 2017 Los Angeles City Building Code.

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

The approval is based on fire test and environmental test for exterior use or interior use.

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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RE: Thermo-Lag 3000 Subliming Material, Thermo-Sorb, Thermo-Sorb VOC, Thermo-Lag E100 Fire Resistive Coating for Structural Steel.

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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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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Attachments: 25484 Attachments Sketches (43 pages)