



Carboline Company  
Executive Offices  
350 Hanley Industrial Court  
St. Louis, MO 63144  
314/644-1000  
FAX: 314/644-4617

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## **CARBOLINE THERMO-SORB – PATCH AND REPAIR GUIDE**

**READ THESE INSTRUCTIONS CAREFULLY BEFORE PATCHING, REPAIRING, CONNECTING, WELDING, OR BOLTING STEEL THAT HAS BEEN PROTECTED WITH CARBOLINE THERMO-SORB.**

For Thermo-Sorb application information, please refer to the most recent Thermo-Sorb Application Instructions.

### **PATCHING SMALL DAMAGED AREA**

1. Completely remove Thermo-Sorb slightly beyond the damaged area, using a grinder, utility knife, chisel or sandblasting.
2. Using sand paper, remove the topcoat an additional ¼ inch around the damaged area.
3. Clean steel surface of any dust, dirt, grease or any other material that may impair bond and reapply primer if the existing primer is damaged.
4. If a different approved primer is used over an existing primer, ensure that they are compatible.
5. Apply Thermo-Sorb to the thickness specified for the required hourly protection.

### **CLAMP ON CONNECTIONS INSTALLED AFTER APPLICATION OF THERMO-SORB**

Examples of clamp on connections include pipe, sprinkler pipe and utilities support brackets. Small to medium size clamps and clips are usually left unprotected. Large clamps and clip supports are usually protected with the same thickness as the structural member, due to the possibility of heat transfer. These connection details are not usually addressed in the fire test design information. It is recommended that the Authorities Having Jurisdiction be consulted for approval.

Where support clamps are required to be protected, the coating should be applied where the clamps are in contact with the structural member, and for four inches beyond the structural member. Refer to the Thermo-Sorb Application Instructions for information including product limitations, required surface preparation, humidity, temperature, application rates, cure times, and topcoat application.

If the Thermo-Sorb is damaged when the clamped connections are removed, the affected area should be touched up in accordance with "PATCHING SMALL DAMAGED AREAS" above.

### **WELDED CONNECTIONS INSTALLED AFTER APPLICATION OF THERMO-SORB**

Welded items such as plates and wide bracket supports are usually protected with the same Thermo-Sorb thickness as the supporting member due to the possibility of heat transfer. These details are usually not addressed in the fire test design information. We recommend the Authorities Having Jurisdiction be consulted for approval and confirmation of their requirements.

Prior to welding connections, remove the Thermo-Sorb a minimum of three inches beyond the area to be welded by using a grinder, utility knife, chisel or sandblasting. Using sand paper, remove the topcoat an additional ¼ inch around the damaged area.

After welding is complete, clean the steel surface to remove all dust, grease, dirt, etc...that would affect the bond, and reapply the specified primer. Apply the Thermo-Sorb to the areas in need of repair and to the connecting items if required. Refer to the Thermo-Sorb Application Instructions for required surface prep, product limitations, humidity, temperature, application rates, cure times, and topcoat application.

### **BOLTED STEEL CONNECTIONS INSTALLED AFTER THE APPLICATION OF THERMO-SORB**

Bolts of threaded rods of  $\frac{3}{4}$  inch diameter or less are usually left unprotected. Bolts or threaded rods greater than  $\frac{3}{4}$  inch diameter are usually protected with the same thickness of Thermo-Sorb as the supporting member, due to the possibility of heat transfer. These connection details are usually not addressed in the fire test design information. We recommend the Authorities Having Jurisdiction be consulted for approval and confirmation of their requirements.

If drill oil is used, oil should be cleaned as soon as possible

If Thermo-Sorb is damaged after drilling, the damaged area should be touched up in accordance with "PATCHING SMALL DAMAGED AREAS" above.

If there is no damage to the Thermo-Sorb system after drilling, no additional treatment is required.