

Albi Clad 800 is an intumescent mastic coating applied to structural steel, concrete and other construction materials for the purposes of fire protection. Albi Clad 800 carries a wide range of UL listings for interior and exterior uses under both the E-119 and the UL 1709 High Rise Hydrocarbon test criteria.

RECOMMENDED USES

Listed by Underwriter's Laboratories for both interior and exterior application, Albi Clad 800 should be specified wherever long-lasting fireproofing with high abrasion and impact resistance is required. Albi Clad 800 is ideal for use in a wide variety of commercial, institutional and industrial environments where conventional fireproofing is not sufficiently rugged, lightweight or attractive. Albi Clad 800 will withstand weathering and chemical fumes. It is highly recommended for use on offshore drilling platforms, petrochemical plants, power plants and dock facilities:

FEATURES

- UL listed for 1 to 3 hours to ASTM E-119 & UL 1709.
- Application maintains the contours of the substrate.
- Asbestos Free.
- Highly resistant to ultraviolet exposure.
- Maintains excellent fire protective properties when exposed to years of extreme abuse and vibration.
- UL tested for both interior & exterior exposures.
- Lightweight & hammer-hard.
- Factory formulated: eliminates job-site mixing.
- Accepted by building codes and insurance carriers.

APPLICATION

Albi Clad 800 is spray applied directly from the shipping container, utilizing standard, heavy-duty, pneumatic spray equipment. Thickness of the application will depend upon the fire endurance rating specified. Albi Clad 800 must be applied by qualified, factory-trained, applicators. Installation must be in accordance with manufacturer's printed instructions, and in compliance with specific test requirements.

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	VALUE
DryAppliedDensity	—	68 PCF
LapShear	ASTM D1002	>371 PS I (cohesive failure)
Cohesive/AdhesiveStrength	ASTM D4541	>375 PSI (cohesive failure)
CompressiveStrength	ASTM D695	2,100 PSI
ModulusofElasticity	ASTM D695	94,800 PSI
FlexuralStrength	ASTM D790	1,420 PSI
ModulusofElasticity	ASTM D790	158,000 PSI
TensileStrength	ASTM D638	756 PSI
AbrasionResistance	ASTM D1044	0.40 gm. loss/1000 cycles
ImpactResistance	ASTM D256	0.54 ft. lbs.in.of notch
Hardness	SHORE D	65 - 70
Thermal Expansion Coefficient	ASTM D696	1.44 X 10 ⁻⁵ in./in./ o F.
ThermalConductivity	ASTM F433	3.0 BTU in./hr. ft ² / o F.
Flame Spread	ASTM E84	15
Smoke Developed	ASTM E84	40
VOC content		248 g/L

SUGGESTED SPECIFICATION

1.0 SCOPE

This specification covers requirements for materials, equipment and application of intumescent mastic to provide fire protection to steel structures and supports as indicated on the design drawings, and in accordance with applicable requirements of contract documents. Further, this specification shall be supplemented by the applicable requirements of building codes, insurance rating organizations and all other authorities having jurisdiction.

1.1 QUALIFICATION OF SUBCONTRACTORS

Application of Albi Clad 800 fireproofing shall be performed by qualified, factory-trained applicators having proper equipment and training to complete the installation in accordance with Albi Manufacturing's recommendations. Proof of such qualification shall be submitted with bid documents.

1.2 SURFACE PREP

1.2.1 Albi Clad 800 intumescent mastic shall be directly applied to surfaces that have been properly prepared to receive this fireproof coating. The surfaces must be clean and dry, free from rust, grease, dust or other contaminants that will interfere with proper bonding.

1.2.2 All steel surfaces shall be primed with compatible metal primer prior to fireproofing application. Phenolic modified alkyd primer shall be Albi 487S or approved equal. For exterior application: steel shall be properly prepared by commercial blast cleaning and primed the same day.

1.2.3 Where existing painted steel is to be fireproofed with intumescent mastic, existing paint surface must be checked for compatibility with intumescent coating prior to fireproofing application. Follow Albi Mfg's instructions for compatibility check.

1.2.4 If it is determined that the existing paint surface is sensitive to mastic fireproofing solvents, then existing steel shall be sand-blasted and reprimed as outlined in section 1.2.2.

1.3 COORDINATION WITH OTHER TRADES

Albi Clad 800 shall be installed after all steel is in place, but before ducts, pipe work, equipment or other obstructions are installed so that fireproofing can be applied to all exposed steel.

1.4 DELIVERY & STORAGE

Albi Clad 800 shall be delivered to the jobsite in factory sealed containers ready to use.

MATERIALS

2.0 FIREPROOFING

Fireproofing shall be applied in accordance with drawings or specifications, and shall conform to fire protective ratings as outlined by UL 263 (ASTM E-119) and/or UL 1709 and classified by Underwriter's Laboratories, Inc. or other independent, acceptable, testing laboratories conducting specific test to meet end-use requirements.

2.1 COATING

Intumescent mastic fireproof coating for interior or exterior use shall be Albi Clad 800 as manufactured by Albi Manufacturing, Division of StanChem, Inc. 401 Berlin Street, East Berlin, Connecticut 06023.

2.2 OVERCOATING

Overcoating is not required with Albi Clad 800. However, if an overcoat is required for color coding, aesthetics or additional surface protection against spills, a suitable topcoat shall be used. For unusually severe environments consult Albi Mfg. for recommendations of appropriate topcoats.

INSTALLATION & FINISH

3.0 INSTALLATION

3.1 Albi Manufacturing recommends that installation be performed with the use of a pneumatic pump designed for application of heavy-duty, viscous materials and a heavy-duty, mastic spray gun. Compressor shall provide at least 80 CFM (2.3 m³/min.) of air at 100 PSI (7 kg/cm²). Material hose must be 3/4" (19.1 mm) I.D. Nylon or other corrosive resistant type suitable for strong solvents. Gun shall have minimum 3/4" (19.1 mm) material inlet and 3/8" (9.5mm) air inlet ports.

3.2 Final wet film thickness application must conform to manufacturer's listed design or to recommendations for specified rating. All surfaces shall be rolled prior to drying of surface film in order to remove unsightly drippings or surface irregularity.

3.3 Small patchwork or damaged areas may be hand-troweled or gloved. When hand troweling, tools must be kept wet with Albi Clad solvent in order to avoid sticking.

3.4 THICKNESS OF APPLICATION

Albi Clad 800 shall be applied to the thickness required in accordance with the acceptable test data. Thickness shall be measured on the basis of wet film thickness taken by frequent random probe measurements during application. Although test data measurements are taken on dry film thickness, supervision of application must be undertaken while material is being installed, since final, cured, dry film thickness will reflect shrinkage due to evaporation of occluded solvents.

3.5 SAMPLE APPLICATION

Before proceeding with the work, the applicator shall apply a section of approximately 100 sq. ft. (9.3 sq. meters) area. This section shall be witnessed by architect's or owner's representative and shall be subject to their approval to be used as guide for texture and thickness of the finished work.

3.6 CLEAN UP

Work area shall be maintained in an orderly condition with good housekeeping conditions prevailing. Upon completion of installation, all debris shall be cleared and removed from jobsite.

3.7 GUARANTEE

3.7.1 Albi Manufacturing shall warrant material to conform to its specification, and be free of manufacturing defects for a period of six months.

3.7.2 Applicator shall guarantee that the installation of material conforms to Albi Manufacturing's recommendations and project specifications, and shall further guarantee the workmanship connected with the installation for a period of one year from date of installation.