

ALBI CLAD TF: FREQUENTLY ASKED QUESTIONS

FINISHED APPEARANCE

1. Can you paint or topcoat Albi Clad TF?

Yes, Albi Clad TF can be covered with a compatible topcoat. As long as you use a compatible product, a topcoat will not affect the fire rating or performance.

2. Is a topcoat required?

No, Albi Clad TF is a tough, durable coating that is complete without any topcoat.

It has been UL tested for resistance to high humidity, heat aging, CO₂/SO₂ industrial aging, chlorine and washing. Albi Clad TF is currently the only thin film fireproofing to pass those rigorous UL environmental tests without requiring a topcoat.

The main reason to use a topcoat with Albi Clad TF would be to achieve a different surface color. (However in certain industrial locations where the Albi Clad TF will be subject to specific chemical fumes or spills, a topcoat is required.)

3. Does Albi Clad TF come in colors? Can you tint it?

Albi Clad TF comes in off-white. You cannot tint it, as adding sufficient quantities of pigment could affect the fire performance. If you want a color finish you may cover the Albi product with a compatible topcoat.

4. Can I get a smooth finish with Albi Clad TF?

Albi Clad TF is sprayed on using airless equipment resulting in a relatively smooth finish. When properly applied by an approved contractor, the surface has a pleasing architectural finish with a slight texture. It is not perfectly smooth, owing to the spray process, as well as the presence of small particles, which are integral to the intumescent character.

Albi Clad TF does not have the pronounced “orange peel” effect of some other thin film type products. In the hands of a trained applicator who makes multiple passes to achieve the coverage, Albi Clad TF produces a very refined architectural finish.

5. Will Albi Clad TF give me a straight edge along the steel flanges?

Albi Clad TF will give you a straight edge along the steel, however because it is sprayed, you will not attain a knife-edge appearance.

Be aware that longer fire ratings require a thicker coating. When the product is sprayed to achieve a two-hour rating or more there may be a slight waviness if you inspect it closely. For example, if you were to sight along a column sprayed with .55" of Albi Clad TF for a 3 hour rating, you might detect a slight wave along the length of the steel. (The UL listing is based on a "minimum average dry film thickness" to account for slight variations.) If you stand back a few feet, the appearance of the same column is of a smooth uniform edge.

6. Will Albi Clad TF allow me to maintain all steel contours?

In most cases yes, the Albi Clad TF allows you to maintain the contour of the substrate. However, the appearance of the fireproofed steel members will vary depending on the size of the steel and the hourly rating. Small members, protected for longer amounts of time will lose quite a bit of their contour, for instance on a 3 x 3" angle sprayed with 2/3" of fireproofing will show a softened interior corner.

On large pieces of steel, even the longer hourly ratings do not require more than .67" of fireproofing, thus their contours are quite clearly maintained.

SUITABLE LOCATIONS

1. Can Albi Clad TF be used in both interior and exterior locations?

No. Albi Clad TF is formulated for interior use. For exposed exterior applications use our heavy-duty solvent-based product, Albi Clad 800. (However, Albi Clad TF is a rugged product, which may be used in certain protected areas that are open to some extent. See the following questions.)

2. Can you use Albi Clad TF in an interior, unheated space? What about a covered parking garage?

Once it is fully cured, Albi Clad TF can be used in an unheated interior.

When cured, Albi Clad TF can also withstand intermittent exposure to exterior conditions, such as light rain and snow. It can be used in a covered parking garage in most climates. For a parking garage application, we recommend using a topcoat. Avoid using TF in extreme weather conditions such as locations where drifting snow or heavy rains are likely to be blown into the garage.

3. Can Albi Clad TF withstand high humidity? Repeated washing?

Yes, Albi Clad TF is a durable hammer-hard finish which has been UL tested for resistance to high humidity and industrial washing. It has also passed UL tests for heat aging. With steel that will be fireproofed with Albi Clad TF and subject to repeated washings, we recommend the use of a good topcoat.

4. Is Albi Clad TF resistant to chemicals?

Yes TF has been tested by UL for chemical resistance to CO₂/SO₂, as well as to chlorine. If the product is used for a site that will be subject to chemical fumes or spills, a topcoat is required.

5. Can Albi Clad TF withstand abrasion and/or heavy traffic?

Yes, Albi Clad TF is hard, durable and abrasion resistant. It has been successfully used in:

Atriums, Industrial Plants, Hotel Lobbies, Hospitals, Food Processing Plants, Parking Garages, School Gymnasiums, Correctional Facilities, Convention Centers, Warehouses, Sports Stadiums.

6. Can Albi Clad TF be applied in occupied areas?

Yes, Albi Clad TF is a water-based formulation that is ideal for locations where solvents cannot be used. It is fully compliant with EPA VOC regulations.

FIRE RATINGS, CODES AND APPROVALS

1. Why do you stress UL, Inc?

Underwriters Laboratories Inc is the undisputed leader in the evaluation of fire resistive construction materials. UL conducts extensive fire tests of the rated assemblies. In addition, UL subjects the coating to accelerated aging and elevated humidity, and then exposes those samples to the fire tests. Exterior coatings, and some interior coatings are tested as well for resistance to industrial atmosphere, salt spray, ultraviolet light, freezing and simulated rain. After testing, UL makes follow-up visits to the manufacturer to assure that the product sold continues to match the product tested.

UL's facilities, fire test experience, environmental assessments, rigorous impartiality, and wide acceptance by code officials and other authorities, are unmatched by other testing bodies.

2. What is the maximum hourly rating you can achieve?

Albi Clad TF is listed by UL for up to 3 ½ hours.

3. What does UL mean by “Conditioned Interior Space” and “Interior General Purpose Space”? How is Albi Clad TF classified?

UL makes a distinction between two types of interior classifications for intumescent fireproofing.

The Conditioned Interior classification means that a coating is limited to use in climate-controlled locations with no exposure to condensation, and relative humidity of less than 75%. UL cautions that these conditions must apply during application, curing, building construction and building use. Consequently, products for Conditioned Interior Space generally must be applied after the building is closed in and the HVAC systems are operating.

The Interior General Purpose designation applies to intumescent coatings that have performed well in UL’s more demanding environmental tests, including 180-day high humidity, heat aging and ultraviolet exposure. UL indicates conditions for application and building construction of General Purpose intumescent are as specified by the manufacturers.

Albi Clad TF is classified for Interior General Purpose Space. In addition to the above tests, TF was tested by UL for resistance to industrial atmosphere, chlorine and washing, so it can handle relatively rugged interior uses. While Albi Clad TF must be protected from direct weathering during application and building construction, it is not necessary to wait until the building is climate-controlled for application.

4. Does Albi Clad TF comply with BOCA, SBCC, ICBO and IBC requirements?

Yes, all Albi products are designed to meet all relevant local, state and regional building codes, including BOCA, SBCC, ICBO and IBC.

5. Do you have city code approvals such as MEA, LARR, SF?

Yes, Albi Clad TF has been reviewed and is accepted by all individual state and city building codes, including New York, Los Angeles, and San Francisco.

STEEL CONFIGURATIONS

1. We need fireproofing for steel columns embedded in block walls with column face exposed on both sides. Would Albi Clad TF work there?

Yes. While no exact tests exist, you could use the standard column listing. The block would act as an additional heat sink.

2. How do we best fireproof a steel truss?

It depends on the size of the elements that make up the truss. If the steel components are small, an intumescent is not the most suitable product. Albi DriClad would be better.

If the truss is larger, the elements are similar to steel sizes that have UL listings and you can work from those listings.

3. How can I fireproof ductwork, such as grease ducts or air handling?

Ductwork is best protected by Albi DriClad. Intumescent are not designed for use on sheet metal, but you can box them in with DriClad boards.

4. How do you fireproof steel rods holding up a suspended walkway?

Unless you have a recoverable spray booth, the only way to economically fireproof steel rods is by gloving the material onto the rods.

5. I have a roof joist that I wish to leave exposed. What do you suggest?

Typically roof joists are quite small and are not good candidates for intumescent fireproofing. Consider using Albi DriClad instead.

6. How do I fireproof lintels to conform to Building Code?

Here too, no exact UL listing exists for any manufacturer. For the most part you should use the most restrictive fire test, i.e. a column listing. However because the lintels are horizontal, most code officials prefer a beam listing.

7. UL beam designs call for flutes of metal deck to be filled. How is that accomplished?

As with most UL designs of this order, the accepted method is to fill the flutes with safeing material (4 lb/cu. ft.)

8. Can clips for hangers be attached over the material?

Yes, clips are usually best installed after the fireproofing has been applied.

ABOUT THE MATERIAL

1. Does Albi Clad TF contain asbestos?

No. All Albi products are 100% free of asbestos.

2. What are the differences between Albi Clad TF and Albi Clad 800?

Albi Clad TF is for Interior use. Fire ratings can be achieved with a very thin coating with a smooth aesthetic finish that highlights the structural steel elements in your design. Albi Clad TF is water-based.

Albi Clad 800 is for Exterior use. It is a heavy-bodied, solvent-based mastic designed to withstand exterior weathering and challenging industrial uses. Albi Clad 800 requires a slightly thicker application than TF and the texture is considerably rougher.

3. What is the difference between Albi Clad TF which “can be painted” and other water based products which “must be painted”, and is it important?

There is a big difference between Albi Clad TF and those competing thin film products that require a topcoat. Albi Clad TF earned a “General Purpose Interior” listing from Underwriters’ Laboratories without any topcoat. It passed rigorous environmental tests for humidity, heat aging, chlorine and CO₂/SO₂, and then passed the fire tests. The competing products that “must be painted” require a protective topcoat to pass the environmental tests prior to the fire tests.

APPLICATION OF THE PRODUCT

1. Do you have to be an approved contractor to apply Albi Clad TF?

Definitely. Applicators must be trained to achieve the proper thicknesses for fire safety performance, as well as to obtain the smooth finish that is the goal when Albi Clad TF is specified. Our sales representative or our headquarters office can provide a list of approved, experienced contactors who have been trained at Albi Manufacturing.

2. Does Albi Clad TF require specialized spray equipment?

Albi Clad TF must be applied with heavy-duty pneumatic airless spray equipment. We have intensively tested equipment manufactured by both Graco and Speedflo.

3. Can Albi Clad TF be applied by roller, by brush, by trowel?

In almost all instances Albi Clad TF should be sprayed. It is very difficult to obtain a good finish with a brush because the material does not flow to fill in stroke marks, and a roller will not work at all.

However for tight locations or unusually small jobs, the material may be applied by trowel, or palmed in with a gloved hand. Albi Manufacturing can supply the product in a trowel grade formulation for these situations.

4. Will Albi Clad TF adhere to bare steel?

It probably would, however we recommend all steel be primed before applying the Albi Clad. UL fire tests are made on primed steel.

5. What is your recommendation regarding a primer?

Albi manufactures two compatible primers, which will protect against corrosion and prepare the steel for the Albi Clad.

Albi 487 S is an alkyd primer with a solvent base. It is a very effective steel primer that is generally appropriate in most situations.

Albi 490 W is a rust inhibitive acrylic primer for application near occupied interiors or other situations where you want to avoid solvent use.

The UL tests were performed using Albi primers and we generally recommend you use our primer as well. In some cases the steel will be primed at the steel yard.

If the steel is already primed, or if you elect to use a primer other than one of our products, it is necessary to check compatibility with Albi Manufacturing. As a water-based product, Albi Clad TF has few problems with compatibility, however it is important to check prior to application.

6. Does Albi Clad TF protect against corrosion?

No, Albi Clad TF is not formulated to function as a moisture barrier or a surface sealer. A compatible primer is required to protect the steel against corrosion.

7. Can Albi Clad TF be applied at the steel yard and then shipped to the jobsite?

Yes. Albi Clad TF is often applied by the steel fabricator and then shipped to the job site. The material must be fully cured before shipping, and both loading and unloading of the steel must be carefully supervised.

8. What about protection from the elements? Can you apply Albi Clad TF in a building that is not yet weather tight?

Albi Clad TF must be protected during the application and curing process from direct rain, freezing, and direct snow.

Once Albi Clad TF is fully cured, it can withstand light, intermittent exposure to exterior conditions such as light rain and snow. However since it is impossible to predict the severity of all weather conditions that might occur on the jobsite, we recommend that the product be protected until the building is enclosed.

(In climates where the weather is very stable and predictable such as Los Angeles you would not need to protect the fireproofing during the dry season.)

9. Do any weather conditions such as high humidity or low temperatures restrict application of Albi Clad TF?

Yes, here are some guidelines.

Cold temperatures. Because Albi Clad TF is water based, it cannot be applied at temperatures below 40°. In addition, both the steel and the fireproofing material must be over 50°.

Extreme high temperatures. It also should not be applied in extremely high heat, where the steel surface or the material in the drum exceeds 120°.

High humidity. Following good painting practice, Albi Clad TF should not be applied when the relative humidity exceeds 85%

10. Is it difficult to dispose of excess material at job completion?

No, since Albi Clad TF is a water-based product, excess drums with some residual material should not pose a disposal problem. However, it is imperative that the applicator checks with the local waste disposal authority, and complies with local, state and federal regulations.

CONSIDERING SPECIFYING ALBI CLAD TF

1. Is there a project nearby where we can see an actual application?

Very likely. Over the last five years we have covered over 30 million square feet of steel with Albi Clad TF. In the first section of this binder there is a list of hundreds of representative projects around the country where Albi products have been used. In addition, your regional sales manager will know of others.

2. We are in the process of doing a feasibility study. How can we estimate budget costs for Albi Clad TF?

Albi produces a chart of installed budget costs. You can download a copy from our website, request one from your regional sales manager, or find one in the Albi binder for specifiers.

3. Where can I get further information about specific questions I have regarding Albi Clad TF?

Contact one of our sales representatives (listed on the next two pages) for answers to your specific questions. Quite a bit of printed information is available on our website www.albi.com including brochures, product data sheets, estimating and budget information, application guides, and long form specifications which you can download in PDF format.