



TPO with CLEAN Film

Contractors have two options for a clean TPO roof after installation:

- 1.) Have a crew properly clean roof; or
- 2.) Utilize a TPO membrane with removable protective film.

Let's look at the labor steps involved with out clean film and with:

Option 1 - TPO	Option 2 - TPO with CLEAN Film
Unload roof to provide full access to roofing membrane	Unload roof to provide full access to roofing membrane
Load roof with appropriate cleaning equipment	Peel protective film from roof surface
Power wash entire roof surface with detergent and water	Properly dispose of used film
Is there adequate access to water?	<i>The cost is primarily a slightly increased material cost up front with a negligible additional labor component compared to the first option. The increase cost of a roll of Mule-Hide TPO with CLEAN Film adds less than one hour of labor cost to the project.</i>
Do local municipalities require the collection of run-off due to use of detergents?	
Care must be taken to protect the membrane from damage if the pressure nozzle is used too close to the membrane	
Unload roof of all cleaning equipment	
<i>The cost can be substantial and includes costly labor at the completion of the job. Many job site variables can increase the labor needed to complete the power washing of the roof system.</i>	

The cost to pressure wash a TPO roof is typically between \$.15 and \$.75 per square foot. With CLEAN Film, there is no need to clean the roof after installation—simply remove the film and the roof is ready for final inspection. Busy crews can save a day with this solution.

Installing a membrane with protective film:

- Guards against damage and dirt pick-up due foot traffic
- Reduces roof glare during installation
- Ensures no loss of initial reflectivity immediately after install due to dirty roof

The only option when:

- An easy, time saving solution is necessary
- A reliable water source is unavailable to clean roof post-installation
- Water conservation and water containment/runoff regulations impose restrictions on traditional cleaning process

Core Fact: Mule-Hide CLEAN Film can save at least a day of additional labor compared to power washing the roof.



Features

- Durable, rugged – film does not shift, designed to withstand the most intense heat and UV exposure, wind and rain without deteriorating
- Easy to remove – stress-free, splinter during removal up to 90-days post-installation; one person to remove
- Saves time and labor
- Ideal for re-roofing, re-cover and new construction projects

Benefits

- Improves aesthetics
- Increases customer satisfaction when extremely clean roofs are required

Things to keep in mind upon install:

- Film left in the seam area will prevent the TPO from being welded. The film must be peeled back before welding if the sheet must be cut for size or when projections must be flashed in the field. The film can be re-applied once the seaming process has been completed. Striped seams can occur along the exposed membrane.
- The contractor should be aware that static electricity may be generated while removing the film. Care should be taken to prevent sparks from coming in contact with flammable materials.

Which membrane colors and sizes can be purchased with the CLEAN Film option?

At this time, only 60-mil White in 6' & 10' x 100' is available.

Are there any cold weather restrictions?

There are no temperature restrictions.

Is there a shelf life?

There is no shelf life.

Have you tested RhinoBond® with the CLEAN Film applied to the membrane?

Yes, the heat from the RhinoBond induction welder does not affect the Film's performance.

Is there a 3" area on both sides of the sheet? Do you run your robot over the film? Does the welder affect the film?

On the edge with the overlap line, the film is held back approximately 1/2" from the line so it will not interfere with the weld. On the unmarked edge, the film is held back approximately 1/2" from the edge of the membrane so as to not contact the "heel" of the welder's nozzle. The robot runs over the film but since the membrane is between the nozzle and the film, there is no effect on the film from the heat.

What are the spec hooks and spec language that should be used?

Consider using the following language in specifications: TPO surface must be protected from dirt and staining during installation or surface must be cleaned after installation is complete. TPO surface must retain 90% of its published new reflectivity on 90% of the TPO membrane surface upon project completion.

What is suggested method for welding end laps?

Peel the CLEAN Film back a few inches on the bottom sheet and weld the end laps. After the weld is complete fold the CLEAN Film back into place.

How do we deal with repairs/patches required to repair damage resulting from construction traffic? Do we wait to patch leaks until the cover is peeled off or do we cut the cover to make the patches, thereby exposing the repaired membrane to subsequent construction traffic?

Yes, the two scenarios are the only choices. Either temporarily repair the damage until the protective film is removed or remove the film in the area that needs to be repaired and make the repair. The film can be "re-adhered" back over the repair by applying pressure to the film.

Is the protective film recyclable?

No, the protective film cannot be recycled due to the adhesive on the film.

Is there a risk of leaving the protective film on for more than 90 days? If we wanted to leave the protective film on until the other trades have completed their work, it could take longer than 90 days.

Currently, Mule-Hide Products supports a 90-day time-frame insuring there are noticeable differences with the removal process.