



ElastoSpec Lite™ Installation / Application Guide

ElastoSpec Lite™ form liners are available in DOT approved semi-elastomeric materials. ElastoSpec Lite™ was developed to bridge the gap between our SpecVac™ plastic and ElastoSpec™ plywood-backed solid urethane form liners. It is suitable for use in pre-cast, cast-in-place, and custom tilt-up applications.

Trimming

ElastoSpec Lite™ form liners are typically made in 4' x 10' sheets, although custom sizes and art panels are often produced in this versatile material. ElastoSpec Lite™ is an un-bonded semi-elastomeric material and like all plastic materials, allowances should be made for thermal expansion and contraction. When it is necessary for the material to be trimmed, use a circular hand saw (skill saw) with a fine tooth, plywood blade, such as the type used for cutting fine veneer paneling. If the liner is to be butted against a rustication strip or reveal, the blade angle should be set so that the liner is cut at the same angle as the reveal. The effects of temperature must also be considered. 140 degree plus Fahrenheit can cause permanent damage to the elasticity of the material. Temperature variations can cause the size of the liner to grow or contract 1/16" or more, depending on the pattern, in 10' with each 10 degree temperature change. Form liners should be installed at about the same ambient temperature as expected during the placement of concrete.

Attachment to Formwork

ElastoSpec Lite™ form liners can be used in most any concrete applications. Before attaching the form liner, make sure the side to be poured against is identified. The concrete side of the liner has the pattern detail. Listed below are recommended procedures for installation.

- Screws or nails should be spaced approximately 12" to 18" on center around the perimeter and 18" to 24" in the center. Self-Drilling washer head screws work well.
- Pneumatic staplers are easy to install, although they do not hold as well as screw or nails and should be spaced closer together.
- Seams can be caulked with silicone. Take extra precautions to make sure seams and tie-holes are well sealed so that concrete cannot leak behind the liner.

Placing Concrete

Cast-in-place architectural concrete usually requires a mix, which has very good workability. Proper vibration will reduce the risk of air bubbles, honeycombing and surface blemishes. Architectural concrete should be placed using a pump and an elephant trunk to avoid mix separation splatter and trapped air. Most form liners cannot withstand a rate of pour in excess of 4 to 5 feet per hour. Generally, the more texture of relief on the form liner, the slower the concrete must be placed. If a plasticizer is used, the rate of pour may have to be reduced to limit form pressures.

All dirt, debris, and water should be removed before placing concrete. Follow ACI recommendations for the vibration of concrete.

Form Release

Consult with Spec Formliners, Inc. technical support for the proper form release to use with form liners.



Stripping Form liner

It is essential that all form liners be stripped with an equal time interval from concrete placement to stripping. Different time intervals will result in inconsistent coloring from different levels of moisture loss. If possible, forms should be stripped within twenty-four (24) hours of concrete placement. Formwork should be stripped at 90-degree angles to the form if possible. Ribbed fractured textures will require special care to avoid breaking off fins from both concrete and form liner.

Tilt-up panels should not be lifted until the concrete has reached the specified concrete compressive strength. In most cases the form liner will remain on the slab. Single-use form liner may be discarded after stripping. Multi-use form liner is easily cleaned by hosing down with water and/or scrubbing with a brush.

A neutral, non-staining release agent can be used to aid in stripping and to ease clean up of form liner for additional pours. Release agents should be sprayed on form liners as close as possible before concrete placement time. For best results, the liner should be cleaned after each use and a new coat of release agent applied before each concrete placement.

Rustication

Reveals or rustications are recommended at butted joints. Seams should be made at the valley of the concrete, as that joint is less visible. All butted joints should be taped and/or caulked to reduce grout leakage.

Care and Storage of Form Liner

All ElastoSpec Lite™ Form liners are sensitive to the effects of the sunlight, ultraviolet rays and extreme weather conditions. Form liners should never be stored outside in direct sunlight. When not in use or being cleaned, form liners should be stored either indoors or under black polyethylene. Ultraviolet rays may cause discoloration on the form liner surface. This discoloration will not affect the concrete surfaces. Concrete form liners should never be exposed to temperatures in excess of 140 degree Fahrenheit. Excessive temperatures can cause permanent deformation.