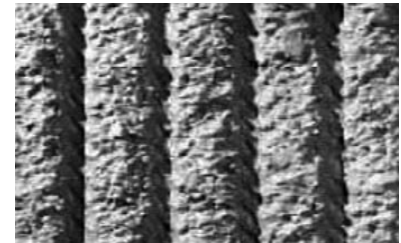
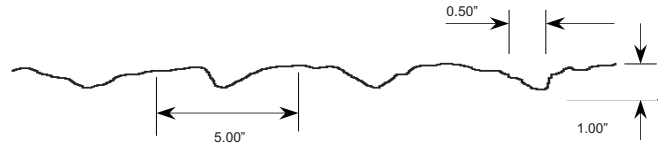


Fractured 1410 - 1" Deep, 5" OC Ripper Rebar



HIPS - High Impact Polystyrene (Single use only)		
Properties	Rating	ASTM
IZOD Impact, ft.-lb/in.		
@70°F	2.0	D256
@0°F	1.3	D256
Tensile Strength	3,700 psi	D638
Heat Deflection	188	D695
Vicat Softening	212	D1525
Wt.lb./sq.ft.		
.070 mil	.449	
.090 mil	.577	
.110 mil	.705	
.130 mil	.833	
.150 mil	.966	
ABS - Acrylonitrile-Butadiene Styrene (Multiple uses up to 10 times)		
Properties	Rating	ASTM
IZOD Impact, ft.-lb/in.		
@73°	5.6	D256
@0°	1.9	D256
Tensile Strength	5,300 psi	D638
Heat Deflection		
@264 psi	199	D648
@66 psi	211	D648
Falling Dart Impact, ft.-lb.		
@73°F	23	
@40°F	14	
Specific Gravity	1.05	D792
Wt. lb./sq.ft.		
.070 mil	.451	
.090 mil	.580	
.110 mil	.705	
.130 mil	.833	
.150 mil	.961	
PE - Polyurethane Elastomer (Multiple uses up to 40-50 times)		
Properties	Rating	ASTM
Shore A Hardness	45-50	D2240
Tear Strength, PLI	55	D624
Tensile Strength, psi	500	D638
Ultimate Elongation	40%	D638
PPE - Premium Polyurethane Elastomer (Multiple uses up to 100+ times)		
Properties	Rating	ASTM
Shore A Hardness	60-65	D2240
Tear Strength, PLI	120	D624
Tensile Strength, psi	1150	D638
Ultimate Elongation	1200%	D638
Tolerances @ 70F (All patterns, all materials)		
Standard size: 4'x10'		
Length: +1" to 2", -0" (shipped long for field trimming)		
Width: ± 1/4"		
Thickness: ± 1/16" at edge (except over 1" thick)		
Custom size: At customer request, additional charge.		

Application Summary

Reusability – Single-use HIPS plastic, medium-use ABS plastic, and extended-use PE and PPE elastomeric materials are available for your specific concrete forming application.

Rate-of-Pour – Formliners are typically designed to withstand concrete placement of five feet per hour, but there are other materials/methods available if an application exceeds this limit.

Attachment

Formliners are used in cast-in-place, precast or tilt-up. All mounting surfaces should be clean and dry. ABS and HIPS materials can be installed using screws or staples. PE and PPE materials are typically plywood-mounted with adhesive and subsequently bolted to formwork. Adhesive tapes, foam tapes and silicone caulks are used at joints and seams to minimize grout leakage.

Alignment

The formwork must be properly aligned and in common planes. A "stack up" of tolerances can result in a noticeable "step" in the finished concrete surface, especially with "shallow" formliner patterns. Reveals or rustications are recommended at joints to simplify forming, accentuate the texture and reduce grout leakage.

Form Release

Formliners should be sprayed with a premium form release before each use and within the same day concrete is placed. Form release should be applied with a low-flow, wide-angle, flat-spray nozzle and wipe with a cloth to insure an evenly-coated formliner surface. Formliners should always be covered when not in use.