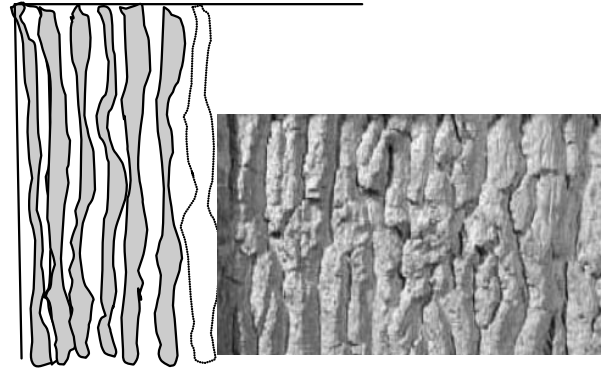
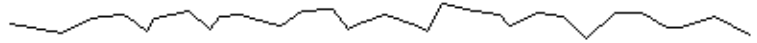


**Stone 1209 - 1-1/8" Fractured Granite**



**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.