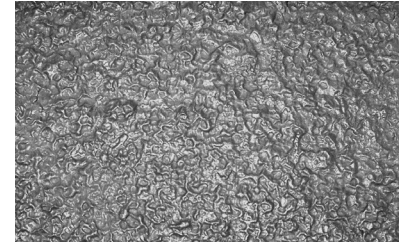


**Stone 1281 Bush Hammer**

Bush Hammer Texture  
Relief: 3/16" - 1/4"



**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.