









# **Misc Patterns**



# MISCELLANEOUS PATTERNS

1600 - 53"x 124" Smooth Face	3
1603 – 1/2" Max Depth Flagstone	4



**MISCELLANEOUS** 

# 53"x 124" SMOOTH FACE

1600

#### **TECHNICAL DATA** Misc 1602 HIPS High Impact Polystyrene Plastic Properties Rating ASTM IZOD Impact, ft.-lbs./in. @70°F 2.0 D256 D256 @0°F 1.3 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 Misc 1602 ABS Acrylonitrile-butadiene styrene IZOD Impact, ft.-lbs./in. @73 5.6 D256 @0 1.9 D256 Tensile Strength, 73°F, psi D638 Yield 5,300 330,000 D638 Modulus Flexural Strength 73°F, psi D790 9 300 Yield 325,000 D790 Modulus Heat Deflection @264 psi 199 D648 D648 @66 psi 211 Hardness (Rockwell R) 73°F 105 D785 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

#### Misc 1602 PE Polyurethane Elastomer

Shore A Hardness	45-50	D2240	
Tear Strength, PLI	55	D624	
Tensile Strength, psi	500	D638 (D412)	
Ultimate Elongation	240%	D638 (D412)	
Misc 1602 PPE Premium Polyurethane Elastomer			
Shore Hardness	60-65	D2240	
Tear Strength, PLI	120	D624	
Tensile Strength, psi	1150	D638 (D412)	
Ultimate Elongation	1200%	D638 (D412)	
Manufacturing Tolerances @70°F Length: +1" to 2", -0" (shipped long to allow field trimming Width: ± 1/4" Thickness @ edges ± 1/16" (except formliners over 1" thickness)			



# Attachment to Formwork

Thermoform Formliners can be used in precast, tilt-up or cast -in-place applications. Single-use HIP is most frequently used for tilt-up applications and can be installed using Tek drywall screws or pneumatic staplers, spacing should be approximately 6" to 12" on center around the perimeter and 18" to 24" through the center. Double Sided Tape, "Formica Top" adhesive, Heavy Duct Tape or Silicone Caulk are all the common ways to attach formliners. Make sure all surfaces are clean, dry and free of dust and debris. Formliner PE & PPE liners are attached from the back with 3/8" bolts when optional T-nuts are installed.

# Form Placement

It is important that forms for architectural concrete be aligned and in common planes. A "Stack up" of manufacturing tolerances can result in forms being in different planes, even when properly aligned. This creates a noticeable "step" in the finished surface, particularly with shallow Formliner patterns.

# **Rustication**

Reveals or rustications are recommended at butted joints so it will allow the features of the liner to appear continuous. All butted joints should be taped and/or caulked to reduce grout leakage.

# Form Release

Formliners should be sprayed with high end form release agent before each use and within the same day that concrete is placed. Apply with low flow, wide angle, flat spray nozzle and wipe with a cloth to insure a complete even coat to the entire formliner surface.



# MISCELLANEOUS

# 1/2" MAX DEPTH FLAGSTONE

1603

[			
TECHNICAL DATA			
Misc 1603 HIPS High Impact Polystyrene Plastic			
Properties	Rating	ASTM	
IZOD Impact, ftlbs./in. @70°F	2.0	D256	
@0°F	1.3	D256	
Tensile Strength	3,700 psi	D638	
Heat Deflection Vicat Softening	188 212	D695 D1525	
Wt.lb./sq.ft.	212	01020	
.070 mil	.449		
.090 mil .110 mil	.577 .705		
.130 mil	.833		
.150 mil	.966		
Mico 1			
Misc 1603 ABS Acrylonitrile-butadiene styrene			
IZOD Impact, ftlbs./in.			
@73° @0°	5.6	D256	
@0 Tensile Strength, 73°F, psi	1.9	D256	
Yield	5,300	D638	
Modulus	330,000	D638	
Flexural Strength 73°F, psi Yield	9,300	D790	
Modulus	325,000	D790	
Heat Deflection			
@264 psi @66 psi	199 211	D648 D648	
Hardness (Rockwell R) 73°F	105	D785	
Falling Dart Impact, ftlb.			
@73°F @40°F	23 14		
Specific Gravity	1.05	D792	
Wt. Ib./sq.ft.			
.070 mil	.451		
.090 mil .110 mil	.580 .705		
.130 mil	.833		
.150 mil	.961		
Misc 1603 PE			
Polyurethane Elastomer			
Shore A Hardness	45-50	D2240	
Tear Strength, PLI	55 500	D624	
Tensile Strength, psi Ultimate Elongation	500 240%	D638 (D412) D638 (D412)	
-	603 PPE	. ,	
	rethane Elastomer		
Shore Hardness	60-65	D2240	
Tear Strength, PLI	120	D624	
Tensile Strength, psi Ultimate Elongation	1150 1200%	D638 (D412) D638 (D412)	
-	~°=	. ,	
Manufacturing Tolerances @70°F Length: +1" to 2", -0" (shipped long to allow field trimming			
Width: ± 1/4"			
Thickness @ edges ± 1/16" (exc	cept formliners over	1" thickness)	





### Attachment to Formwork

Thermoform Formliners can be used in precast, tilt-up or cast -in-place applications. Single-use HIP is most frequently used for tilt-up applications and can be installed using Tek drywall screws or pneumatic staplers, spacing should be approximately 6" to 12" on center around the perimeter and 18" to 24" through the center. Double Sided Tape, "Formica Top" adhesive, Heavy Duct Tape or Silicone Caulk are all the common ways to attach formliners. Make sure all surfaces are clean, dry and free of dust and debris. Formliner PE & PPE liners are attached from the back with 3/8" bolts when optional T-nuts are installed.

#### Form Placement

It is important that forms for architectural concrete be aligned and in common planes. A "Stack up" of manufacturing tolerances can result in forms being in different planes, even when properly aligned. This creates a noticeable "step" in the finished surface, particularly with shallow Formliner patterns.

#### **Rustication**

Reveals or rustications are recommended at butted joints so it will allow the features of the liner to appear continuous. All butted joints should be taped and/or caulked to reduce grout leakage.

#### Form Release

Formliners should be sprayed with high end form release agent before each use and within the same day that concrete is placed. Apply with low flow, wide angle, flat spray nozzle and wipe with a cloth to insure a complete even coat to the entire formliner surface.



# LIMITED WARRANTY

American Formliners Inc. (hereafter known as Supplier) warrants that the Supplier of concrete accessory products sold to Purchaser will be free from defects in materials and workmanship for a period of six (6) months from the date of delivery, and the Supplier will repair, or in its sole discretion, replace, any Product or part thereof found to be defective at the time of delivery if such Product or part is returned (at Purchaser's expense and risk) and received by the Supplier within ten (10) days after the applicable warranty period. Descriptions, representations and other information concerning the Supplier contained in the Supplier's catalogs, advertisements or other promotional materials or statements or representations made by the Supplier's sales agents or representatives shall not be binding upon the Supplier and shall not be part of this limited warranty unless expressly identified in writing as PRODUCT SPECIFI-CATIONS.

This limited warranty does not cover normal maintenance, or items consumed during installation or normal operations, normal wear and tear, use under circumstances exceeding specifications, use for purposes other than the use for which the Products were intended, abuse, unauthorized repair or alteration, improper installation, failure to follow the Supplier's printed instructions, guidelines and recommendations for installation and use, lack of proper maintenance or damage caused by natural causes such as fire, storm, or flood. Purchaser shall determine the suitability of the Product for his intended use and Purchaser assumes all liabilities and risks whatsoever in connection therewith.

This limited warranty is Purchaser's exclusive remedy. It shall not be deemed to have failed of its essential purpose so long as the Supplier is willing and able to repair or replace defective products or parts thereof in the manner specified. No allowance will be made or repairs made by Purchaser. Except as herein provided, the Supplier shall not be liable to Purchaser in any manner with respect to the Products. In no event shall the Supplier liability to Purchaser ever exceed the purchase price of the allegedly defective Product. Except as herein provided, the Supplier for transportation, labor or other charges for adjustments, repairs, replacements of parts, installation, or other work, which may be done upon or in connection with the Products sold.

THE SUPPLIER SHALL NOT IN ANY EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER, INCLUDING LOST PROFITS, whether arising from any defect in the Products, any use of the Products, from Purchaser's inability to use the Products, or otherwise. This limited warranty applies to only products made by the Supplier.

NO OTHER EXPRESS AND NO IMPLIED WARRANTIES OF ANY TYPE, WHETHER FOR MERCHANTABILITY, FITNESS FOR A PARTICULAR USE, OR OTHERWISE, OTHER THAN THOSE EXPRESSLY SET FORTH ABOVE (WHICH ARE MADE EXPRESS-LY IN LIEU OF ALL OTHER WARRANTIES) SHALL APPLY TO THE PRODUCTS.

# Make an Marssion in Your Concrete!

Professional Formliners for the Construction Industry. Over 100 quality patterns & textures to choose from!





Office: 1567 Frontenac Road • Naperville, IL 60563 • Tel. (630) 615-2170 • Fax (630) 615-2182 Plant: 645 Airport Road • Centralia, IL 62801 • Tel. (877) 533-5842 • Fax (618) 533-5840 www.americanformliners.com