

## HAA OPAQUE BLOWN HAND FILM

### .80 mil

#### Product Description

HAA is Sigma's opaque black blown hand film. It is ideal for concealing valuable products and has high-quality containment attributes. 100% Recyclable. Available in widths from 11 inches - 18 inches.

#### Applications

Brick & Block	Bagged Products
Warehouse	Boxed Products
Irregular Loads	Multi-use Applications
Transportation Industry	
Food Distribution	

Film Properties	Typical Value (English)	Tolerance	Test Method
Tensile Strength at Yield MD	1600 psi	± 15%	ASTM D882
Tensile Strength at Yield TD	1700 psi	± 15%	ASTM D882
Tensile Strength at Break MD	6900 psi	± 15%	ASTM D882
Tensile Strength at Break TD	4700 psi	± 15%	ASTM D882
Elongation at Break MD	470%	± 15%	ASTM D882
Elongation at Break TD	700%	± 15%	ASTM D882
Protrusion Puncture	8.6 lbs.	± 15%	ASTM D5748
Protrusion Puncture Energy	17.5 in-lb	± 15%	ASTM D5748
Elmendorf Tear Strength MD	140 g/mil	± 15%	ASTM 1922
Elmendorf Tear Strength TD	750 g/mil	± 15%	ASTM 1922
Cling - Outside to Inside @ 225%	min 150 g/in	± 15%	ASTM D5458

Dimensions	Value	Tolerance
Core ID	3.05 inches	± 0.05%
Film Thickness	20.3 micron	

**Manufactured with pride in the USA and Canada by  
Sigma Stretch Film**

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