



Prime Tuff-X STF consists of a Thermoplastic elastomer skin laminated to closed-cell, cross-linked polyolefin foam that is then laminated to our Tuff-X rigid substrate. Low gloss and soft feel eliminate the need for soft-touch paint. (<5% after forming) It also helps eliminate the squeak and rattle that is characteristic of Styrenics. Recycling of unpainted scrap is possible with no loss of properties.



PRIME TUFF-X STF

Prime Tuff-X STF	Very High	High
Impact Strength		*
Low Temperature Impact Strength		*
Tensile Strength		*
Flexural Modulus	*	
Heat Deflection Temperature		*

Applications:

Tuff-X STF is ideal for interior and exterior components, including center consoles, instrument panels, door panels, and many others. This addresses the customers' desire for a low-gloss, soft feel material to soften interior and exterior applications in markets such as agricultural equipment, marine, heavy trucks, RV cabs, and others, while utilizing a thermoplastic, recyclable material.

Finishing:

Tuff-X STF can be fabricated by using steel rule or hard dies, heated knives or tooling will work, however, routing and sawing is not recommended. Mechanical screws and fasteners, as well as some adhesives that have been developed by 3M, may be used for bonding.

Property	Test Method	Value	Unit
Hardness, Shore A (skin)	ISO 868	88	
Density (skin)	ISO 1183	.0264	lb/in ³
Mold Shrink	ISO 294	.007 to .009	in/in
Flexural Modulus (sub)	ISO 178	300,000	psi
Tensile @ Yield (sub)	ISO 527-2	3100	psi
Total Energy @ 23°C	D3763	460	in-lb
Total Energy @ -15°C	D3763	558	in-lb
Failure Mode @ -15°C		50% ductile	
HDT @ 66 psi, Substrate	ISO 75	240	°F
HDT @ 264 psi, Substrate	ISO 75	140	°F
CLTE		2.75x10 ⁻⁵	in/in/°F

Processing:

Prime Tuff-X STF can be formed using standard forming equipment. The foam/skin side should not be formed against the tool. Radiant heat works best, Zone controlled ceramic or quartz heaters are preferred. The run out or flange area should be greater than what is figured for ABS or HIPS. The substrate should reach normal forming temperature but the foam should not exceed 310°F.

Colors, Textures and Capabilities:

Primex typically offers a Naples and Leather texture and four colors consisting of light and dark, tan and gray. Custom color matching is available but order sizes must be approved.