

A.9 FIRE SAFETY DATA

POLYSTEEL® FORM SAFETY INFORMATION	
Flash ignition temperature	698°F (370°C)
Self ignition temperature	824°F (440°C)
TOXICITY	
<p>These toxicity tests results compare the total sum of toxicity factors (carbon monoxide, carbon dioxide, and poisonous chemicals) found in the smoke of burning materials as compared to the smoke from burning red oak.</p>	
<u>Material</u>	<u>Sum of Toxicity Factors</u>
PolySteel® Form	20
White Pine	50
Red oak	100 (the standard)
PVC (poly vinyl chloride)	360
Wool	390
ABS (plastic pipe)	280
Urethane (rigid)	290
<i>US Testing Co Report No 03298</i>	
FLAME SPREAD	
<p>The distance flame spreads from the igniting flame during a 10-minute fire exposure under controlled test conditions in a test tunnel. The results of the test are compared to the flame spread on asbestos-cement board and the flame spread on an untreated red oak floor under similar fire exposure.</p>	
<u>Material</u>	<u>Flame Spread</u>
Asbestos-cement board	0
PolySteel® Form	10 ft. (0 ft. per Dade Co., FL)
Untreated red oak flooring	100 ft.
Maximum accepted by Building Codes	75 ft.
SMOKE DEVELOPMENT	
<p>The amount of smoke developed during a standardized burning test in a test tunnel. The results are compared to the smoke developed by burning an asbestos-cement board and the smoke developed by burning a red oak floor under similar fire conditions during a 10-minute period. The amount of smoke development is determined by the light absorption percentage of the smoke using a photoelectric circuit operating across the test furnace flue pipe.</p>	
<u>Material</u>	<u>Smoke Development</u>
Asbestos-cement board	0
Untreated red oak flooring	100
PolySteel® Form	Less than 300
Maximum accepted by Building Codes	450
<i>Flame spread and smoke development test procedures according to ASTM E84 and similar to the following: UL-723, ANSI No 2.5, NFPA No 255, and UBC 42-1.</i>	