## TYPICAL PROPERTIES OF MODIFIED EXPANDED POLYSTYRENE FOAM BOARD

Property		Units	<b>ASTM Test</b>	Density pe		
			_	1 lb	2 lb	3 lb
Thermal Resistance	@ 25% I	per in		4.17	4.54	XXX
Values (R)	@ 75% F	thick		3.85	4.17	4.4
Thermal Conductivity	@ 25% I	BTU/hr	C177 or	0.23	0.2	
K Factor	@ 40% F	BTU/hr	C518	0.24	0.21	
	@ 75% F			0.26	0.23	
STRENGTH PROPERTI	ES - Compressi	ve				
10% deformation		psi	D1621	13-17	25-33	60
flexural		psi	C203	28-35	55-75	95
tensile		psi	D1623	16-20	23-27	90
shear		psi	D732	18-22	33-37	
shear modulus		psi	*****	280-320	600-640	
modulus of elasticity		psi	*****	180-220	460-500	
Moisture Resistance						
WVT		Perm-in	C355	1.2-3.0	0.6-1.2	
Absorption (by volume)		Percent	C272	Under 2.5	Under 2.5	2
Capillarity		*****	*****	None	None	
Water Absorption (less th	an)	% by volume	C-272	2.5	1	2
Coefficient of Thermal Expansion		Inches		0.000035	0.000035	
Maximum Use Temperati	ures					
Continuous exposure		% F	****	167	167	
Intermittent Exposure		% F	*****	180	180	
Flash Ignition Temperature		% F	D-1929	675	675	
Self Ignition Temperature		% F	D-1929	675	675	

## **BUILDING CODE CLASSIFICATION**

ICBO Research Report No. 3414 - Meets State of California Quality Standards: City of Los Angeles No. 24158 and No. 24195: ICBO Research Report No. 3401 and No. 3530: H.U.D. No. 71 (Sheathing) Approvals based on raw material suppliers certifications.

## **FLAMMABILITY PROPERTIES**

Board Thickness	1 in Max	2 in Max	4 in Max	1in Max	
Board Density (Pounds per cubic ft) FIRE HAZARD CLASSIFICATION	1.0	1.0	1.0	1.5	
Flame Spread	5-10	5-10	10-15	5-10	20
Fuel Contributed	ND	ND	ND	ND	
Smoke Developed	15-125	40-125	40-125	15-50	

ASTM tests are used solely to measure and describe properties in response to heat and flame inder controlled laboratory conditions. Flame spread, fuel contributed and smoke developed ratings derived are not intended to reflect hazards under actual fire conditions. FIRE HAZARD CLASSIFICATION: UL Procedure 723.ASTM E-84: TESTING ACCREDITATION: UL Listing R5817. R5817 & R5212.