



One Industrial Dr. ~ P.O. Box 130 ~ Constantine, MI 49042
Phone: 269.279.1700 ~ Fax: 269.435.7760

FMVSS 302
CMVSS 302

Date: 10/1/2012
Lot No: F- Oct-12
Sample Code No: # 38
Grade: .100 V2

TEST INFORMATION FOR FMVSS 302 & CMVSS 302

SPECIFICATION RESULTS FOR .100 Valdor #2 Board

MAXIMUM FLAMMABILITY 101 mm / minute SE 0 mm/m

We are please to certify this material to the above standard(s).



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Phone: 269.279.1700 ~ Fax: 269.435.7760

Date: 2/1/2014
Lot No: F- Feb-14
Sample Code No: # 38

TEST INFORMATION FOR

FCI name of product .100" Valdor # 2 Foundation Board, (all sizes)
Ford Motor Company Engineering Material Specification: ESB-M2E4-B (03/02/83)
Fiberboard (Panel) ,Laminated-Polyethylene lined- Forming Grade

DETAILED REQUIREMENTS

Environmental Conditioning: Temperature 70°F ± 2°F, Humidity 50% ± 5%

	FORD MOTOR ENGINEERING SPECIFICATIONS ESB-M2E4-B	ACTUAL TESTING RESULTS
THICKNESS, SAE J315 & TAPPI T411 * Or as specified on the engineering drawing	Not specified	2.55 mm
3.3 MOISTURE CONTENT, (SAE J315) based on original weight	7.0 % Maximum	6.88 %
3.4 WATER ABSORPTION, (SAE J315) 24 hour immersion @ 21°C	20 % Maximum	19.5 %
3.5 WARP, (FLTM BS 2-1) 24 hour water immersion	MD 4 % Maximum CD 4 % Maximum	0.00 % 2.11 %
3.6 BURST STRENGTH, (SAE J315&TAPPI T807)	1.100 MPa/mm Minimum	1.514 MPa/mm
3.7 TENSILE STRENGTH, (ASTM D828) 180mm span, 25.4mm wide sample, 10 second break time	MD 0.88 kN/mm Minimum CD 0.35 kN/mm Minimum	1.29 kN/mm 0.40 kN/mm
3.8 DIMENSIONAL STABILITY (SAE J315) method B EXPANSION, 24 hours water immersion. @ 21°C CONTRACTION, method C, 24 hours @ 88°C	MD 0.2 % Maximum CD 0.2 % Maximum MD 0.7 % Maximum CD 0.7 % Maximum	0.06 % 0.20 % 0.25 % 0.70 %
3.9 TRANSVERSE STRENGTH (FLTM BS 5-1) 152mm span, 76mm x 305mm sample	MD 20 N/mm Minimum CD 11 N/mm Minimum	26 N/mm 12 N/mm
3.12 ADHESION, (FLTM BN 13-1) Original ply 25mm x 200mm sample, 300mm/minute	2.2 N Minimum	12 N
3.13 STAINING, (FLTM AN 101-3) method "A"	Rating 5 AATCC	No Stain

We are pleased to certify that the above named material meets the requirements of the Ford Motor Company Engineering Materials
Note: If flammability testing is required, see ESB-M2E4-D



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Date: 3/1/2014
Lot No: F- Mar-14
Sample Code No: # 105

TEST INFORMATION FOR

FCI name of product .100" Valdor # 2 Foundation Board, (all sizes)
Ford Motor Company Engineering Material Specification: ESB-M2E4-D (03/02/83)
Fiberboard (Panel) ,Laminated-Polyethylene lined- Forming Grade

DETAILED REQUIREMENTS

Environmental Conditioning: Temperature 70°F ± 2°F, Humidity 50% ± 5%

	FORD MOTOR ENGINEERING SPECIFICATIONS ESB-M2E4-D	ACTUAL TESTING RESULTS
3.3 MOISTURE CONTENT, (SAE J315) based on original weight	7.0 %maximum	7.00 %
3.4 WATER ABSORPTION,(SAE J315) 24 hour immersion @ 21°C	20.0 %maximum	16.1 %
3.5 WARP, (FLTM BS 2-1) 24 hour water immersion	WMD 4.0 %maximum AMD 4.0 %maximum	0.00 % 1.69 %
3.6 BURST STRENGTH, (SAE J315&TAPPI T807)	1.100 MPa/mm minimum	1.464 MPa/m
3.7 TENSILE STRENGTH,(ASTM D828) 180mm span, 25.4mm wide sample, 10 second break time	WMD 0.88 kN/mm minimum AMD 0.35 kN/mm minimum	1.17 kN/mm 0.37 kN/mm
3.8 DIMENSIONAL STABILITY (SAE J315) method B EXPANSION, 24 hours water immersion. @ 21°C CONTRACTION, method C, 24 hours @ 88°C	WMD+ 0.20 % maximum AMD + 0.20 % maximum WMD - 0.70 % maximum AMD - 0.70 % maximum	0.06 % 0.11 % 0.23 % 0.67 %
3.9 TRANSVERSE STRENGTH (FLTM BS 5-1) 152mm span, 76mm x 305mm sample	WMD 20 N/mm minimum AMD 11 N/mm minimum	61 N/mm 30 N/mm
3.12 ADHESION, (FLTM BN 13-1) Original ply 25mm x 200mm sample, 300mm/minute	2.2 N minimum	12 N
3.13 STAINING, (FLTM AN 101-3) method "A"	Rating 5 AATCC	No Stain
3.14 MAXIMUM FLAMMABILITY,FLTM BN 24-2 (FMVSS302)	101 mm / minute	SE 0 mm/m

We are pleased to certify that the above named material meets the requirements of the Ford Motor Company Engineering Materials
Specification ESB-M2E4-D