

Green with Creativity

SierraPine Specialty MDF Panels Medite II, Medex, Medite FR2

Your design is your signature - don't compromise on any building elements. Since 1989, SierraPine has been a leader in the sustainable building market with our environmentally friendly Medex, Medite II and Medite FR2 composite panels.

Environmental Stewardship

SierraPine continues our long-term commitment to the responsible use of renewable resources. Among the first in the industry to receive certification at all of our manufacturing facilities, SierraPine is recognized by the following independent third-parties for using 100% recovered and recycled wood fiber content in all of our composite wood panel products, as well as being certified for the use of formaldehyde-free resin in our Medite II and Medex products.

- Composite Panel Association's Environmentally Preferable Product (EPP) Grademark Certification Program
- Scientific Certification Systems (SCS) Certification
- LEED Building Rating System by USGBC

Medite II

Interior applications – SCS and EPP Certified for **no-added formaldehyde** and for 100% recovered and recycled fiber.

Medex

Interior moisture applications – SCS and EPP Certified for **no-added formaldehyde** and for 100% recovered and recycled fiber.

Medite FR2

Flame retardant applications – SCS Certified for 100% recovered and recycled fiber, UL Class 1 certified for smoke and flame spread.

LEED Credits Supported:

Material and Resources 4.1, 4.2, 5.1, 5.2
Indoor Environmental Quality 4.4

Collaborative for High Performance Schools (ChiPs):

Meet Materials Specifications for VOC emissions section 01350.

LEED Credits Supported:

Material and Resources 4.1, 4.2

Listed in the following Green Product Guides:

- "Green Spec Directory"
- OIKOS
- National Park Service, Department of Conservation
- Austin, Texas, Green Builder Program
- "Prescriptions for a Healthy House"
- Alameda County Green Building Resource Guide

Board Room, East End Capitol Project, Sacramento, CA



Project Resume

LEED Buildings

- New York Department of Environmental Conservation
- East End Capitol Project – Sacramento, California
- The Solaire – Battery Park, New York

Museums

- J. Paul Getty Museum
- Metropolitan Museum of Art

Public Buildings

- Mayo Clinic Nursery
- San Francisco Courthouse & Public Library Schools
- Harvard Library
- University of British Columbia, Choi Institute



medite® II



East End Capitol Project conference room

Medite II is a no-added formaldehyde MDF panel engineered for non-structural applications and can be used in place of sanded plywood and solid wood. This panel provides the flexibility of a composite panel with the emissions of solid wood.

For LEED buildings or other projects where indoor air quality (IAQ) is a concern, no-added formaldehyde Medite II is the ideal choice as it surpasses all current international emission standards. Medite II was used extensively in the nation's first sustainable residential high-rise: the Solaire in Manhattan.

Environmental Certification

Medite II is SCS and EPP Certified for no-added formaldehyde and 100% post industrial recycled wood fiber. Medite II has also passed California 01350 testing.

Features & Benefits

- Standard wood product finishing processes apply to Medite II
- Finishing – can be painted, laminated, and veneered
- Exceptional machining and low toolwear
- Fastening – Medite II readily accepts and holds staples, screws, and other wood fastening hardware
- Available in thicknesses ranging from 3/8" – 1 1/4"

Technical Data

Average Physical Properties for 3/4" when tested to ASTM D 1037-96a Part A

Property	Units	
Imperial Units		
Density	48	Lb/ft ³
Internal Bond	150	Lb/in ²
Modulus of Rupture	5,500	Lb/in ²
Modulus of Elasticity	550,000	Lb/in ²
Hardness	1,150	Lbs, Janka ball
Screw Holding, Face	350	Lbs req'd to pull 1" #10 sheet metal screw
Screw Holding, Edge	275	Lbs req'd to pull 1" #10 sheet metal screw
Metric Units		
Density	769	Kg/m ³
Internal Bond	1.03	N/mm ²
Modulus of Rupture	37.9	N/mm ²
Modulus of Elasticity	3790	N/mm ²
Hardness	522	Kg Janka ball
Screw Holding, Face	159	Kg req'd to pull 25mm #10 sheet metal screw
Screw Holding, Edge	125	Kg req'd to pull 25mm #10 sheet metal screw
Other Data		
Water Absorption	6.5	24-hour soak, Ave. %
Thickness Swell	3.5	24-hour soak, Ave. %
Linear Expansion	.27	% dimensional change in length & width due to humidity change from 50% - 80% RH
Moisture Content	6	Avg. %, oven-dry basis
Thickness Tolerance	± .005" or ± .005" or	Average from nominal Deviation from average
Flame Spread Rating	U/L , Class C	

Storage & Conditioning

- Storage – Store indoors on flat, level surface with adequate support to prevent sagging.
- Conditioning – For best results, Medite II should be conditioned to the environment for 48 – 72 hours prior to installation.
- For more details on working with MDF, consult "MDF From Start to Finish," published by the Composite Panel Association, www.pbmdf.com.



LEED Credits Supported

Contributes to achieving Credits for:

- Material & Resources – 4.1 & 4.2 and 5.1 & 5.2
- Indoor Environmental Quality – 4.4

Applications

- Architectural woodwork
- Cabinets
- Paneling
- Mouldings
- Display cases



Mail Room

How to Specify

Industrial Grade Medium Density Fiberboard (MDF), manufactured with a formaldehyde-free binder and which meets the requirements of ANSI A208.2-2002.

Limitations

Medite II is not suitable for structural applications or where moisture may be present.



Employee breakroom

Medex is a no-added formaldehyde, moisture resistant MDF panel engineered for interior high moisture areas. Used in place of sanded plywood and solid wood in non-structural applications, Medex gives you the versatility of a composite panel with the emissions of solid wood.

For LEED projects or other buildings where indoor air quality (IAQ) is a concern, no-added formaldehyde Medex is the ideal choice as product emissions meet and exceed international standards.

Environmental Certification

Medex is SCS and EPP Certified for no-added formaldehyde and 100% post industrial recycled wood fiber. Medex has also passed California 01350 testing.

Features & Benefits

- Medex is especially suitable in interior applications where moisture is a concern
- Standard wood product finishing processes apply to Medex
- Finishing – can be painted, laminated, veneered
- Exceptional machining and low toolwear
- Fastening – Medex readily accepts and holds staples, screws, and other wood fastening hardware

Technical Data – Moisture Resistant* Medex
(Typical data when tested to ASTM D 1037-96a Part A)

Property	Thicknesses		Units
	3/8" – 3/4"	13/16" – 1 1/4"	
Imperial Units			
Density	48	47 – 44	Lb/ft³
Internal Bond	200	165	Lb/in²
Modulus of Rupture	6,000	4,500	Lb/in²
Modulus of Elasticity	600,000	500,000	Lb/in²
Hardness	1,200	1,000	Lbs, Janka ball
Screw Holding, Face	350	300	Lbs req'd to pull 1" #10 sheet metal screw
Screw Holding, Edge	275	225	Lbs req'd to pull 1" #10 sheet metal screw
Metric Units	9.5 – 19.1mm	20.6 – 31.8mm	
Density	769	752 – 700	Kg/m³
Internal Bond	1.38	.69	N/mm²
Modulus of Rupture	41.4	32	N/mm²
Modulus of Elasticity	4137	3447	N/mm²
Hardness	544	454	Kg Janka ball
Screw Holding, Face	159	136	Kg req'd to pull 25mm #10 sheet metal screw
Screw Holding, Edge	125	102	Kg req'd to pull 25mm #10 sheet metal screw
Other Data			
Water Absorption	14 – 5	6 – 5	24-hour soak, Ave. %
Thickness Swell	8 – 3	3 – 2	24-hour soak, Ave. %
Linear Expansion	.32 – .30	.26 – .20	% dimensional change in length & width due to humidity change from 50% - 80% RH
Moisture Content	4 – 6	4 – 6	Avg. %, oven-dry basis
Thickness Tolerance	± .005" or ± .005" or	± .005" ± .005"	Average from nominal Deviation from average
Flame Spread Rating	U/L , Class C		

* The term "moisture resistant" as used in this context indicates compliance with ASTM D1037-96A six-cycle accelerated aging test.

Storage & Conditioning

- Storage – Store indoors on flat, level surface with adequate support to prevent sagging.
- Conditioning – For best results, Medex should be conditioned to the environment for 48 – 72 hours prior to installation.
- For more details on working with MDF, consult "MDF From Start to Finish," published by the Composite Panel Association, www.pbmdf.com.



LEED Credits Supported

Contributes to achieving Credits for:

- Material & Resources – 4.1 & 4.2 and 5.1 & 5.2
- Indoor Environmental Quality – 4.4

Applications

- Countertops
- Window sills
- Bathroom cabinets and woodwork
- Bow & bay window head and seat boards
- Display cases
- Raised panel door inserts

How to Specify

Industrial Grade Medium Density Fiberboard (MDF), manufactured with a formaldehyde-free binder and which meets the requirements of ANSI A208.2-2002.

Limitations

Medex is not suitable for structural applications, exterior siding or exterior trim.

Finishing Instructions

Medex Finishing Guidelines for commercial signage are available through SierraPine, either by calling (800) 676-3339 or via our website at www.sierrapine.com. Click on MDF, then Medex for a downloadable PDF.

Warranty

SierraPine Limited Warranty is available upon request.

medite® FR2

SierraPine's flame retardant Medite FR2 is designed for applications where Class 1 flame retardant material is required. FR2 leads the industry with its low flame spread and smoke development.



Public reception area

During the manufacturing process an additive is blended with the wood fibers to provide flame-retardant properties throughout the board, from the core to the surface. This technique provides better protection than topical flame-retardant applications. Medite FR2 can be machined, cut, sanded or grooved at a later date without compromising its flame retardant properties.

Flame retardant FR2 is especially effective when used in applications in schools, libraries, hospitals, theatres, office buildings, public buildings, medical facilities, laboratories, and museums.

Environmental Certification

Medite FR2 is SCS Certified for 100% post-industrial/pre-consumer recycled wood fiber.

Performance Certification

U/L certified to U.S. & Canadian Class 1 standards.

- Flame Spread rating – 20
- Smoke Development rating – 20

Features & Benefits

- Finishing – can be painted, laminated, or veneered. When choosing a finish, confirm that the product will not react with or neutralize the Class 1 flame spread classification of FR2. Laminating information available upon request
- Exceptional machining and low toolwear
- Fastening – FR2 readily accepts and holds staples, screws, and other wood fastening hardware

Technical Data – Medite FR2 (Typical data when tested to ASTM D 1037-96a Part A)

Property	Thicknesses	Units
Imperial Units	3/8" – 1"	
Density	48 – 46	Lb/ft ³
Internal Bond	130	Lb/in ²
Modulus of Rupture	4,000	Lb/in ²
Modulus of Elasticity	550,000	Lb/in ²
Hardness	1,200	Lbs, Janka ball
Screw Holding, Face	350	Lbs req'd to pull 1" #10 sheet metal screw
Screw Holding, Edge	275	Lbs req'd to pull 1" #10 sheet metal screw
Metric Units	9.5mm – 25.4mm	
Density	769 – 737	Kg/m ³
Internal Bond	.90	N/mm ²
Modulus of Rupture	31	N/mm ²
Modulus of Elasticity	3792	N/mm ²
Hardness	545	Kg Janka ball
Screw Holding, Face	159	Kg req'd to pull 25mm #10 sheet metal screw
Screw Holding, Edge	125	Kg req'd to pull 25mm #10 sheet metal screw
Other Data		
Water Absorption	31 – 17	24-hour soak, Ave. %
Thickness Swell	12 – 5	24-hour soak, Ave. %
Linear Expansion	.32 – .27	% dimensional change in length & width due to humidity change from 50% - 80% RH
Flame Spread Index	20	Indicative Test result. When tested to UL 723
Smoke Development Index	20	Indicative Test result. When tested to UL 723
Thickness Tolerance	± .005"	Average from nominal
	± .005"	Deviation from average

Storage & Conditioning

- Storage – Store indoors on flat, level surface with adequate support to prevent sagging.
- Conditioning – For best results, FR2 should be conditioned to the environment for 48 – 72 hours prior to installation.
- For more details on working with MDF, consult "MDF From Start to Finish," published by the Composite Panel Association, www.pbmdf.com.



LEED Credits Supported

Contributes to achieving Credits for:

- Material & Resources – 4.1 & 4.2 and 5.1 & 5.2

Applications

- Paneling
- Sheathing
- Display panels
- Doors
- Shelving

How to Specify

Industrial Grade MDF, that meets Surface Burning Characteristics in accordance with ANSI/UL 723, ASTM E84-01, CAN/ULC-S102M with a Flame and Smoke Development of 20. New York City approved MEA 244-03-M.

Limitations

Medite FR2 is not suitable for external or structural applications.



Elevator lobby, New York Dormitory Authority