INSULATED COMPONENT STRUCTURES - ROCKY

ROCKY MOUNTAIN

www.ICS-RM.com

MANUFACTURER OF STRUCTURAL INSULATED PANELS (SIPs)

Save Time!

- Quicker Building Erections
- Eliminate most onsite Framing
- Reduce Weather Delays
- Save on Electrical Rough-in
- Eliminate Inefficient onsite Insulation Installation

Save Money!

- Less Jobsite Waste
- Less Time from Loan to Close
- Less Jobsite Labor & Overhead
- Lower Utility Bills
- Lifetime Warranty

Save Energy!

- Reduce Heating & Cooling Loads
- Eliminate Air Infiltration
- Eliminate Convective Heat Loss
- R-28 with 4.5" Walls or Roofs
- R-42 with 6.5" Walls or Roofs

Polyurethane Structural Insulated Panels — The Better Way to Build

This modular classroom in North Carolina was built in 10 days from the start of construction to the start of class.

FACTS ABOUT THE ICS PATENTED SYSTEM

Embedded steel cam-locks allow for a quick, easy, and secure (40,000 pound rating) installation.
Steel-reinforced tongue-&-groove panel joints create rigid and airtight connections between panels.
ICS SIPs are up to 7 times stronger than standard "2x" frame construction.
Patented one-piece corners eliminate thermal-bridging in a traditional problem area.
ICS SIPs form an extremely energy-efficient building envelope.

U.S. GREEN BUILDING COUNCIL MEMBER

FACTS ABOUT THE ICS POLYURETHANE FOAM CORE

Saves energy and reduces pollution by reducing heating/cooling loads
Saves trees with lower lumber requirements
No formaldehyde or VOCs
Uses agricultural-based materials
Helps prevent mold and mildew
Blocks airborne pollutants
No asbestos, glass, or cellulose fibers
ASTM Class 1 Fire Resistance Rating
FEMA Class 4 Flood Resistant Material
Winner of the EPA 2004 Stratospheric Ozone & Climate Protection Award

[Photo shows cam-wrench, cam-locks, tongue-&-groove panel connection system with metal splines, polyurethane foam core, and OSB substrates.]

"This is not your typical garage. From the unique sawtooth extension design to the brilliant daylit interior, this is an impressive facility – and it saves money, too. Even more important though,the people using it, like it."

-Ron Kechter,
Facilities Project Manager

The City of Fort Collins' Municipal Vehicle Storage Building achieved Leadership in Energy and Environmental Design (LEED) Silver Certification. The use of ICS SIPs helped achieve this rating.

CURRENT TESTS	TEST STANDARD	RESULTS	
FOAM			
Compressive Strength & Modulus	ASTM D-1624-00	Strength	35 psi
Compressive Strength & Modulus	ASTM D-1624-00	Modulus	790 psi
Density	ASTM D-1622-98		2.5 pcf
Dimentional Stability	ASTM D-2126-99		Excellent
Flammability - Smoke Generation	ASTM E-84-01		<400
Flammability - Flame Spread	ASTM E-84-01		<25
Foam Core Fire Rating		*** Integrity	CLASS 1
Linear Coefficient of Thermal Expansion	ASTM D-696-98		-40°F to +240°F
Closed Cell Content by Air Pycnometer	ASTM D-2856-87		>96%
Shear Strength and Modulus	ASTM C-273-61 (1988)	Strength	26 psi
Shear Strength and Modulus	ASTM C-273-61 (1988)	Modulus	325 psi
Resistenace to Solvent	ASTM D-543-95 (2001)		Excellent
Resistenance to Mold/Mildew	ASTM D-543-95 (2001)		Excellent
Thermal Conductivity	ASTM C-518-91	K-factor	0.14(Btu-in/ft^{2}hr°F)
Thermal Conductivity	ASTM C-518-91	R-Value	7.25 per inch
Tensil Strength and Modulus	ASTM D-1623-78 (1995)	Strength	16 psi
Tensil Strength and Modulus	ASTM D-1623-78 (1995)	Modulus	325 psi
Water Absorption	ASTM D-2842-01		2.40%
Vapor Permeability	ASTM D-2842-01		2 perm/in

*** Polurethane foam is a "thermo-set" plastic. Melting does NOT occur.

CURRENT TESTS	TEST STANDARD	RESULTS	
Structural Panel* **		Surfaces	Max load (Avg)
Compression	ASTM E-72-98 section 9	*OSB/OSB	50624
Transverse	ASTM E-72-98 section 11	*OSB/OSB	6734
Racking	ASTM E-72-98 section 14	*OSB/OSB	4897
Compression	ASTM E-72-98 section 9	**GALV/GALV	13366
Transverse	ASTM E-72-98 section 11	**GALV/GALV	4900
Racking	ASTM E-72-98 section 14	**GALV/GALV	6723

* 7/16" OSB both surfaces
** 24 GA Galvanized both surfaces
*** Panel Size = 4-1/2" X 48" X 96"

ENERGY STAR PARTNER

Rebuild America U.S. Dept. of Energy

EnergySmart Schools

BUILT GREEN®

PATH PARTNERSHIP FOR ADVANCING TECHNOLOGY IN HOUSING PARTNER

CALL US TO SCHEDULE A VISIT TO OUR FACILITY!

ROCKY MOUNTAIN

INSULATED COMPONENT STRUCTURES – ROCKY MOUNTAIN, Inc. (ICS-RM)

5858 WRIGHT DRIVE, LOVELAND, COLORADO 80538-8806 U.S.A.
PHONE: [1] (970) ICS-SIPS · FAX: [1] (303) 484-4892 · www.ICS-RM.com
E-MAIL: BRIAN@ICS-RM.com OR ROGER@ICS-RM.com