

# DISTRIBUTORS & VOLUME PURCHASERS WELCOME. CALL RYAN OR JK @ 888.623.4223 (ICCF)

ALL RIGHTS RESERVED



ALL RIGHTS RESERVED





# THE PERFECT BLOCK .COM

A NEW Insulated Composite Concrete Form (ICCF) THAT'S MADE WITH CEMENT & 100% RECYCLED EPS



# PICTURED HERE IS ONE OF EBS'S MANY PRODUCTS "10 INCH ICCF BLOCK"



EBS IS THE ONLY COMPANY WITH AN ASYMMETRICAL ICCF BLOCK

# Some GREAT BENEFITS THAT COME WITH THE PERFECT BLOCK

- FIREPROOF / 4HR RATING PLUS
- HURRICANE SAFE / CATEGORY 5
- EARTHQUAKE SAFE / 8.0
- MOLD & PEST PROOF
- **NOISE REDUCTION**
- SAVES ENERGY / CAN EXCEED R50

(4223)

ADD OUR 10 DIFFERENT PRODUCT LINES TO YOUR BOTTOM LINE AND ADD \$\$\$

WE ARE LOOKING FOR REPRESENTATIVES IN THE ICF INDUSTRY WANTING TO ADD THE PERFECT BLOCK ICCF TO THEIR PRODUCT LINE

YOU HAVE THE CLIENT BASE TO OFFER MORE PRODUCTS TO YOUR CUSTOMERS WHAT'S STOPPING YOU?

# THE PERFECT BLOCK .COM

WE DROP SHIP ANYWHERE IN THE WORLD. MANUFACTURED IN PEORIA, AZ.

For More Info: 888-623-1CCF

# Eco Building Systems Corp.™

### WHAT IS "THE PERFECT BLOCK®"?

#### What is "The Perfect Block®"?

"The Perfect Block®" is an insulated composite concrete form (ICCF) system made of a mixture of ground up post-industrial, post-consumer expanded polystyrene (EPS) also commonly known as "Styrofoam", Portland cement, and proprietary admixtures and water. Nearly 87% of the volume of an ICCF block is recycled EPS. The EPS is what gives the ICCF block its outstanding insulating properties. We are using a modern era waste product that would be filling the world's landfills to create a much needed energy efficient building block. When the cores of assembled ICCF blocks are filled (grouted) with concrete and reinforcement steel (rebar) the cured structure provides a permanent framework for a grid of reinforced concrete to form highly insulated stem walls, load-bearing walls, shear walls, non-load bearing walls, sound attenuation walls, lintels, perimeter walls, retaining walls, and many other components of a building. "The Perfect Block®" is in the family of ICCFs commonly called "gray block". Because ICCF is a composite mixture of ground up EPS and Portland cement it has its characteristic gray color which differentiates it from other "white" ICF blocks and is referred to as an insulated composite concrete form (ICCF).

#### Why build with "The Perfect Block®" block?

#### WE TAKE A MODERN DAY WASTE MATERIAL (EPS), AND MAKE IT INTO SOMETHING GREAT!

"The Perfect Block®" is a complete low-density insulated composite concrete form (ICCF) building system with significant advantages over traditional "stick framing" construction and with other insulated concrete form (ICF) systems or masonry block.

Advantages over traditional "stick framing" construction

The Perfect Block •	Strength - ICCF walls are at least 700% stronger than stick framed walls and will resist 250 mph winds
The Perfect Block •	Insulation - A 10" ICCF wall has at least 4 times greater thermal resistance than 2x6 batt insulated walls R 40+
The Perfect Block •	Thermal Mass - ICCF wall thickness and density further enhance thermal resistance over stick framing and traditional construction
The Perfect Block •	Fire Resistance - ICCF walls do not burn "open flame" 4000 DEGREES

- The Perfect Block Termite/Insect Resistance ICCF walls have no wood inside. There is no food source for termites or boring insects or rodents. Rodents won't nest in it no dry rot will occur
- The Perfect Block Design Versatility ICCF wall material can be easily cut and shaped into infinite and unique design features for load and non-load bearing walls

# Eco Building Systems Corp.™

#### WHAT IS THE PERFECT BLOCK? (Cont.) =( TPB )

#### Advantages over "white block" ICF

- TPB block is the "greener choice" White block is made of virgin molded EPS. There is little, if any recycled material in white block. In strict contrast to white block, each EBS block has nearly 87% of its volume made of 100%recycled EPS greatly reducing waste that was headed for the landfill.
- TPB block has "teeth", white block doesn't "Tooth" or Teeth" is a term to describe a surface's ability to hold or grip a substrate. EBS block's inherent textured (slightly rough) cementitious surfaces can hold cementitious exterior stuccos and interior plasters or drywall mud without additional furring or wire lathe, eliminating many costly additional materials and labor intensive steps to clad exterior and interior walls. White block has no "tooth" and requires furring and/or secured wire lathe to cover with stucco or plaster.
- TPB block surfaces can remain exposed for years without UV radiation exposure damage. In contrast, white block is vulnerable to UV radiation deterioration and must be covered soon after construction to prevent UV radiation and mechanical damage.
- TPB block requires minimal bracing White block is super lightweight and a significant investment in time and materials is required to brace white block walls before grouting in order to be safe and achieve a high quality wall that is plumb and straight. The precision made EBS block is denser and stronger and requires minimal bracing to create plumb, level, and straight walls saving time and money.

#### TPB Advantages over traditional "gray block" ICF

- Consistent size, shape, and weight EBS blocks are mold formed using a process and under strict quality control. Therefore each Perfect Block is nearly identical to the next allowing for easy stacking with minimal shimming and gluing and making it easier to construct walls plumb and level while saving time, materials and significant money.
- TPB 12" reinforced core spacing EBS block cores are spaced 12" on center. This allows for increased wall strength and any cut block 12" or greater in length can be used for primary wall construction greatly minimizing waste. The expanded flat internal surface provides a continuous horizontal and verticle attachment area 12" on center to safely anchor internal and external heavey items.
- TPB Ease of Construction The improved size and reduced weight of a 4' block over longer and heavier blocks that require more than one person to stack greatly ease handling and assembly saving labor, time, and materials. 4' Increments is a standard in the building industry.
- Several Block Sizes to Choose EBS blocks come in many sizes and insulation thicknesses to optimize the builders desires and requirements.

## WHAT IS THE PERFECT BLOCK®? (Cont.)

Advantages over masonry block

- Building with TPB blocks require no special labor skills Building with masonry block requires skilled labor. In contrast, building with TPB block can be performed by anyone with limited skills. Because of its larger but manageable size to masonry blocks, constructing with Eco Building Systems block will not only save you many hours of labor during the building process but can be a great experience easily building your own house.
- No clean-outs needed Most debris created during construction is EPS beads and cement dust which is lightweight and can easily be removed with vacumn or compressed air before placing corner blocks during final construction.
- No concrete vibration needed With the proper concrete slump, the grout will flow freely throughout all the grid cores without vibration.
- Reinforcing Bars do not need to be tied The block cores keep the reinforcement bars in the proper position during the concrete grout pour eliminating the need for tying.

## **EBS Benefits For Builders:**

- Engineered to be highly consistent with standard residential construction dimensions @ 4 foot lengths
- Forms are precision molded and require minimal shimming for plumb and level walls
- Forms are stout and rigid and create strong straight walls requiring minimal pre-grout bracing
- Forms are large enough to build walls rapidly but small enough for single person handling
- Forms are easily cut with common carpentry tools
- Forms are easily cut for special angles and shapes
- Forms' 12" on center cores allow for any 12" or greater cut block to be used in general construction minimizing leftover building waste

# WHAT IS THE PERFECT BLOCK®? (Cont.)

## **EBS Benefits For Consumers:**

- Cost is highly competitive with wood frame construction
- Structural strength of walls are 700% or more times greater than wood frame construction
- Environmentally friendly forms are made of 87% recycled EPS and no wood, saving energy and forests and minimizing wastes
- Higher appraisal values than conventional "stick built" buildings
- Fire insurance rates are lower than wood frame construction
- Forms' textured surfaces eliminate the first layers of traditional exterior and interior wall cladding, saving material costs and labor
- No organic materials in ICCFs to foster mildew growth or provide food sources for boring insects
- No structural damage from wood eating termites, carpenter ants, dry
- rot etc...
- Provides a tight insulated building envelope leaving home cleaner
- and utility costs lower
- Reduces indoor air pollution and dust allergens Heating and cooling costs reduced by 60-80 percent
- Superior performance in hurricane and tornado prone areas and
- earthquake zones. Withstands 250 mph winds and up to 8 siesmic
- Greatly reduces outdoor noise 70db + -
- Reduces foundation/basement wall cracking and radon gas infiltration ICCF WALLS DO NOT BURN! Exceeds all code requirements for
- flame spread and smoke development
- •



THE PERFECT BLOCK is the ultimate building solution for economical and environmentally-friendly construction. THE PERFECT BLOCK is the solution for this century to build environmentally conscious, energy efficient buildings that provide a safe and healthy living environment.

Several programs have been created over the past few years in an attempt to quantify the environmental footprint of a building, and identify a benchmark for green building. Insulating Composite Concrete Form (ICCF) construction is a consistently strong contributor to any of these green build measures. Perhaps the most recognized is the US Green Building Council Leadership in Energy and Environmental Design (LEED) Green Building Rating System. LEED promotes a whole building approach with performance criteria in five areas: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

#### **Energy Performance:**

A quick review of the 69 possible points available in the LEED for New Construction (LEED NC) identifies energy savings as the most heavily weighed criteria, with up to 10 points achievable. This strong focus on energy savings is appropriate considering the bulk of a building's environmental footprint is caused by the energy consumed in the heating and cooling of a structure over the course of its lifetime.

The high performance thermal envelope of THE PERFECT BLOCK offers a significant contribution towards achieving all 10 of the Energy & Atmosphere Credit 1 Optimize Energy Performance points. The energy conservation effectiveness of THE PERFECT BLOCK is due to the unique synergy of continuous insulation, virtually no air infiltration and the added thermal mass of the concrete wall.

#### **Reduced Footprint**

Sustainable Sites Credit 5.1 calls for reducing the development footprint and limiting site disturbance to conserve existing natural areas. Building with THE PERFECT BLOCK reduces impact to a construction site, as limited bracing is typically erected on the inside of the wall, with limited construction activity around the perimeter. Also the factory is a mobile factory which can be moved.

#### **Durability**

LEED Canada has introduced a Materials and Resources Credit 8, Durable Building with the intent of minimizing construction waste due to premature failure of the building from moisture and structural deterioration. The PERFECT BLOCK Also has less waste at the end of construction which means less in landfills.

The Canadian Standards Association (CSA) Guidelines on Durability in Buildings identifies concrete as a durable material, with high resistance to mold and mildew. Indeed, the



architecture of Ancient Rome is time tested evidence of the endurance of concrete. Six ways THE PERFECT BLOCK helps build green

- 1. Optimized Energy Performance
- 2. Recycled Material Content
- 3. Local Materials
- 4. Durability
- 5. Improved Indoor Air Quality
- 6. Mobility

### **Materials Credit**

THE PERFECT BLOCK contributes to the Materials & Resource Credits in three areas: construction waste reduction, recycled content and regional materials. MR Credit 2.1 and 2.2 seeks to reduce construction waste. THE PERFECT BLOCK typically factors in 2 -5% waste, much lower than most other wall materials. The Recycled-Content Credit MR 4 is applicable for THE PERFECT BLOCK built projects because the forms are manufactured with 80 to 87% recycled expanded polystyrene (EPS). The EPS is primarily post-industrial with some post-consumer waste utilized. The concrete mix used for ICFs can incorporate fly-ash which is 100% post-consumer recycled. The reinforcing steel (rebar) is generally over 80% postconsumer recycled. LEED calculates recycled content by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value. The recycled values of all the building materials used in the building are added for a combined percentage of the total value. Because THE PERFECT BLOCK is made of 80 to 87% recycled-content and typically constitutes a large portion of the total project, it is a large contributor to the MR 4 credit. The Regional Materials Credit MR 5 requires not only the manufacturing, but also the extraction of the material to be within a 500-mile radius (per LEED-NC Vrs 2.2 and LEED Canada-NC 1.0). The aggregate in the concrete mix would generally qualify. THE PERFECT BLOCK operates plants in Arizona to service a large percentage of the South West and East U.S. with additional plants in development.

#### **Indoor Air Quality**

THE PERFECT BLOCK structures can also achieve a high Indoor Environmental Quality. The airtight nature of the THE PERFECT BLOCK wall allows for better control of air flow required by Credit EQ2, Increased Ventilation Effectiveness: additional outdoor air ventilation (v2.2) or effective delivery and mixing of supply air (Canada v1). Using THE PERFECT BLOCK for the building envelope can reduce temperature and humidity variables, and facilitate the maintenance of the comfort ranges specified for Credit EQ7, Thermal Comfort (Canada v.1, provide a thermally comfortable environment). The Environmental Quality Credits 3.2 and 4.1 are concerned with the reduction of pollutants. The EPS foam used to produce THE PERFECT BLOCK emits no VOCs or formaldehyde, nor does it produce any CFCs or HCFCs during manufacturing. EPS will not generate any off-gassing, as the material is inorganic and inert. No adhesives are used in the ICCF production and all products are equally nontoxic, as is the concrete mass.



#### **Sustainable Construction**

In addition to the points determined by the USGBC LEED system, THE PERFECT BLOCK contributes to sustainable construction in many other ways. The sound dampening of the concrete and foam insulation is ideal for protection from urban noise. The solid monolithic concrete wall withstands the worst of rain storms, fires, tornados, hurricanes and even earthquakes. It is also impervious to insects, including termites and eliminates the need for pesticides which can leach into nearby soil. This is a product that will endure, as will its qualities and benefits. An extended service life also relieves landfill burdens. No matter what the green point system, THE PERFECT BLOCK offers the most straightforward solution for an environmentally preferred, energy efficient thermal envelope so vital to sustainable construction.

#### **Innovative Design**

The LEED system also offers the opportunity to be awarded points for exceptional or innovative performance. For example, LEED recognizes the Cradle-to-Cradle (C2C) Evaluation Protocol developed by the McDonough Braungart Design Chemistry (MBDC). MBDC sets the benchmark for independent evaluation of a project's impact on the environment and the waste stream.

#### **Environmentally Friendly**

THE PERFECT BLOCK is 80 to 87% recycled polystyrene, which otherwise would have ended up in landfills never to disintegrate THE PERFECT BLOCK buildings reduce energy consumption, and with energy savings comes environmental benefits. Specifically, the reduction of fossil fuels burned to create energy. By reducing our energy consumption, we reduce combustion by-products that lead to smog and contribute to global warming. Over the life of a 30-year mortgage, a home built with THE PERFECT BLOCK saves our atmosphere 60-90 tons of carbon dioxide (CO2) emissions. Another measure of sustainability is increased service life. Products that last longer make a large impact on our solid landfills.

THE PERFECT BLOCK is an ecological sound building material, consuming recycled raw materials, taking them permanently out of the waste stream and producing a healthy living environment.



Construction Projects using THE PERFECT BLOCK 22

LEED Contribution Point Opportunities for New Construction Projects using THE PERFECT BLOCK: 22 Per the LEED New Construction checklist v2.2, THE PERFECT BLOCK can contribute up to 22 of the required 26 points for a LEED certified project.



8960 W. Larkspur Drive, Ste. 105 Peoria AZ. 85381 Phone 888.623.ICCF (4223) Phone: 602.577.0858

Email: <u>jk@theperfectblock.com</u>

#### Pictures of some of our FIRE PROOF BUILDING PRODUCTS.

# FROM START TO FINISH





THE PERFECT CORNER BLOCK that ships and stacks perfectly

March 8, 2017





"Rebuilding The World One Block At A Time"

Material Safety Data Sheet May be used to comply with OSHA's Ha Communication Standard, 29 CFR 1910 must be consulted for specific requirement	izard ) 1200. Standard ents.	<b>U.S. Department of Labor</b> Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072				
IDENTITY (as Used on Label and List)	Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.					
Section I						
Manufacturer's name: Eco Building Systems Corp		Emergency Telephone Number 888-623-4223				
Address		Telephone Number for Information 888-623-4223				
8960 W. LArkspur Drive Ste. 105 Peoria Az. 85381		January 01,2016				
		Signature of Preparer (c	optional)			
Section II—Hazardous Ingredients/Identity	/Information					
Hazardous Components (Specific Chemical Identity	, Common Name(s))		Other I	_imits		
Liverated Dartland Compart, Desvelad D	a la cada como a	OSHA PEL ACG	GIH TLV Recomm	nended % (optional)		
Hydrated Portland Cement, Recycled Po	biystyrene					
No Hazardous Materials						
Section III—Physical/Chemical Characteri	stics					
Boiling Point	N/A	Specific Gravity (H <sub>2</sub> 0 = 7	1) 0.35			
Vapor Pressure (mm Hg)	N/A	Melting Point N/A				
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1) N/A				
Solubility in Water Non Soluble						
Appearance and Odor Gray – cementatious, odo	rless					
Section IV—Fire and Explosion Hazard Da	ta					
Flash Point (Method Used) N/A		Flammable Limits	LEL N/A	UEL N/A		
Extinguishing Media N/A		1		<u> </u>		
Special Fire Fighting Procedures N/A						
Unusual Fire and Explosion Hazards N/A						

(Reproduce locally)

OSHA 174 Sept. 1985

Section V—Reactivity Data								
Stability		Unstable No		Conditions to Avoid None Known				
		Stable Yes						
Incompatibility	(Materials to Avoid) No	one Known						
Hazardous Decomposition or Byproducts None Known								
Herectory								
Polymerizatio	None Known n	Way Occur						
		Will Not Occur						
Section VI-	-Health Hazard Data	a						
Route(s) of E	ntry	Inhalation? None Known	Skin?	lone Known	Ingestion? None Known			
Health Hazard	ds (Acute and Chronic)	None Known						
Carcinogenici	ty None Known	NTP? None Known	IARC N	onographs? None Known	OSHA Regulated? N/A			
Signs and Sy	mptoms of Exposure No	one Known						
Medical Cond	itions N	one Known						
Generally Age	gravated by Exposure							
	d First Aid Dressdurss	Nana Known						
Emergency a	nd First Ald Procedures	None Known						
Section VII-	—Precautions for Sa	afe Handling and Use						
Steps to Be T	aken in Case Material Is	Released or Spilled: Remov	e and Discard					
Waste Dispos	al Method In constru	uction dumpster						
Precautions to	o Be Taken in Handling a	and Storing; None Known						
Other Precau	tions; None Known							
Section VII-	-Control Measures							
Respiratory P	rotection (Specify Type)	Dust Mask						
Ventilation Local Exhaust N/A				Special N/A				
	Mechanical (General)	N/A		Other N/A				
Protective Glo	ves; Work Glove if r	needed	Eye Pro	tection ; Safety Glasses				
Other Protective Clothing or Equipment; None Known								
Work/Hygienic Practices : Wash Hands								
······,g····, ·······								