



# **Integra** SPEC<sup>®</sup>

THE USER  
FRIENDLY ICF



R E S I D E N T I A L

C O M M E R C I A L

I C F B U I L D I N G S Y S T E M



*Multi-award winning  
ICF Building System*

**I N T E G R A S P E C . C O M**



With decades of experience and innovation in the insulating concrete formwork industry, IntegraSpec® continues its commitment to excellence by offering the most versatile ICF system to build exceptionally energy-efficient, sustainable, healthy and environmentally friendly structures.

## OUR DNA

IntegraSpec® was created with the input of structural engineers, computer assisted design and more than 75 years of field experience in the residential/commercial concrete forms and general construction industry.

IntegraSpec® is truly the toughest ICF in the industry today. The system was developed to address and eliminate the problems that most ICF systems encounter: blowouts, form unit flotation/lift, bulging, wall compression, slow pouring speed and wavy walls.

## INNOVATION AT YOUR SERVICE

The IntegraSpec® system consists of stay-in-place expanded polystyrene concrete form panels which are shipped to site flat in easy to handle bundles, installed in courses and spaced with various sized patented interlocking spacers.

Spacers are designed for fast snap-in-place rebar for a choice of steel sizes and spacing and are easily cut to quickly form openings and provide specific heights. Most importantly, spacers provide mechanical interlock to eliminate form lift.

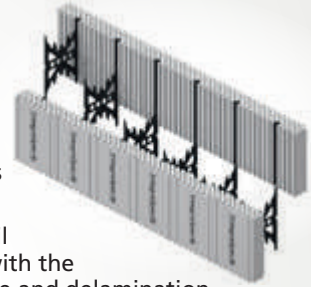
After rapid wall set up and easy alignment, concrete is poured, resulting in a solid monolithic concrete wall structure, ready for exterior/interior finishes.

## THE INTEGRASPEC® DIFFERENCE

The genuine patented multi-directional, “flippable and reversible” IntegraSpec® ICF independent panel design dramatically reduces inventory, site waste, installation time, labor, and transportation costs.

### PANELS

- Panels are bi-directional, eliminating top, bottom, right and left, greatly reducing waste of material.
- Panels are easily cut on a table saw ensuring accuracy without any worries of hitting dangerous metal pins.
- Interior of each panel includes dovetail grooves creating a mechanical bond with the concrete, eliminating air/water leakage and delamination.



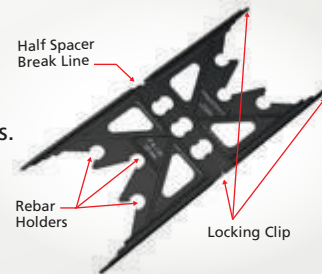
### INSERTS

- Inserts are embedded and uniquely bonded by fusion within the expanded polystyrene (EPS) foam panels. They provide a slide for the various width concrete core spacers. They also provide a continuous vertical reinforcing spine, which also eliminates form compression.
- Inserts are located at every 8" on center and easily identified by the embossed IntegraSpec name. They provide a 1 5/8" furring/studs for attachment of exterior/interior finishes.



### SPACERS

- Spacers are available in 4", 5", 6", 8", 10" & 12" widths and can be combined using the revolutionary “H” clip for wider concrete thickness.
- Spacers also stop form compression often found in other ICFs with foam on foam connecting blocks.



## 6 STEPS IN ONE APPLICATION

- 1 Diverse structural integrity (Concrete & Steel)
- 2 Super insulation (40+ R-Performance)
- 3 1 5/8" furring strips/studs
- 4 Vapor barrier
- 5 Air barrier
- 6 Exterior and Interior Sheeting - uniform flat wall surface

- ONE STEP
- ONE CONTRACTOR/CREW
- LESS TIME



# SIGNIFICANT BENEFITS

## ENERGY EFFICIENCY



Owners enjoy energy savings up to 100% (Net Zero). The total wall system is greater than the sum of its parts, reducing air leakage and increasing the "R" Performance to 40+.

## STRUCTURAL STABILITY



IntegraSpec® offer great protection from high winds in hurricane and tornado areas, withstanding winds in excess of 250 mph.

## QUIET



STC rating of 50+ (or greater when combined with other sound reduction materials).

## IMPROVED AIR QUALITY



No volatile organic compounds (VOCs) and does not support the growth of mold or mildew.

## MOISTURE PROTECTION



IntegraSpec® eliminate moisture and condensation.

## FIRE PROTECTION



Fire protection for several hours ensuring superior safety for your family.

## FAST & RELIABLE



When using IntegraSpec®, you are achieving 6 steps in one.



## THE ECO-FRIENDLY SOLUTION



**100% RECYCLABLE MATERIAL  
NET ZERO HOME / LEED / PASSIVHAUS  
GEOTHERMAL SHELL COMPLIANT**

DEVELOPERS  
ARCHITECTS  
DESIGN PROFESSIONALS  
ENGINEERS  
CONTRACTORS  
HOME OWNERS

## INTEGRASPEC® IS YOUR BEST CHOICE OF ICF TO DELIVER THESE BENEFITS:

- On time and on budget
- Provides outstanding energy performance, indoor air quality, and superior sound and fire resistance
- Lower overall operating/maintenance costs
- Unlimited design opportunities

# AWARDS

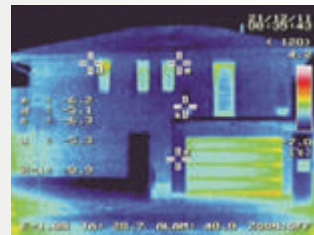
- R-2000 EnerQuality Corporation Environmental Excellence
- Cement Association of Canada Outstanding Energy Efficiency
- Canadian Home Builders Association EnviroHome
- Canadian Mortgage and Housing Corporation Healthy Home
- ICF Builder Heavy Commercial
- ICF Builder Best Overall
- ICF Builder Light Commercial
- ICF Builder Unlimited Residential
- Ontario Global Traders Innovation Excellence
- Cement Association of Canada Design Excellence
- Cement Association of Canada Outstanding Energy Efficiency
- F Hughes Neeley Earth Preserver
- Concrete Contractor Top 25 Contractors' Choice
- ICFA Excellence International Award
- American Concrete Institute GREEN and ENVIRONMENTAL

## STABILIZING EFFECT OF THERMAL MASS ON INDOOR TEMPERATURES

### CHOOSE YOUR PREFERRED HOME

- Blue means no heat loss
- Red means heat loss

#### INTEGRASPEC® HOME



#### TRADITIONAL (WOOD FRAMED) HOME



- NO thermal bridging, cold spots, mold or mildew, or sound transmission.

- Wood studs = thermal bridging
- Installation errors = cold spots
- Prone to mold/mildew/rot
- Noise pollution not mitigated
- Not as structurally stable, resulting in cracks, leaks, pests.

# GENERAL SPECIFICATIONS

## APPROVALS

- ICC #ESR-1147
- BBA # 11/4820
- National Building Codes
- Assorted Tests

## PATENTS

- US Patent No. 5,428,933
- Canadian Patent No. CA 2142517
- Other patents pending

## WALL DESIGN PRINCIPLE

- Monolithic structural concrete wall

## EXTERIOR SURFACE AREA/STD. FORM UNIT

- 4.08 ft<sup>2</sup>, 0.38m<sup>2</sup>

## CONCRETE VOLUME REQUIRED/STD. FORM UNIT

	IMPERIAL	METRIC
4" Cavity	0.050 yd <sup>3</sup>	0.038 m <sup>3</sup>
5" Cavity	0.063 yd <sup>3</sup>	0.049 m <sup>3</sup>
6" Cavity	0.076 yd <sup>3</sup>	0.058 m <sup>3</sup>
8" Cavity	0.101 yd <sup>3</sup>	0.077 m <sup>3</sup>
10" Cavity	0.126 yd <sup>3</sup>	0.096 m <sup>3</sup>
12" Cavity	0.151 yd <sup>3</sup>	0.115 m <sup>3</sup>

## MATERIAL

- HIPS+ Type 2 EPS with new Eco Friendly flame retardant

## THERMAL PERFORMANCE R-40+

- Thermal Mass
- Thermal Dynamics
- Passive Geothermal Loop

## SOUND RESISTANCE

- Minimum STC (Sound Transmission Class) = 50+

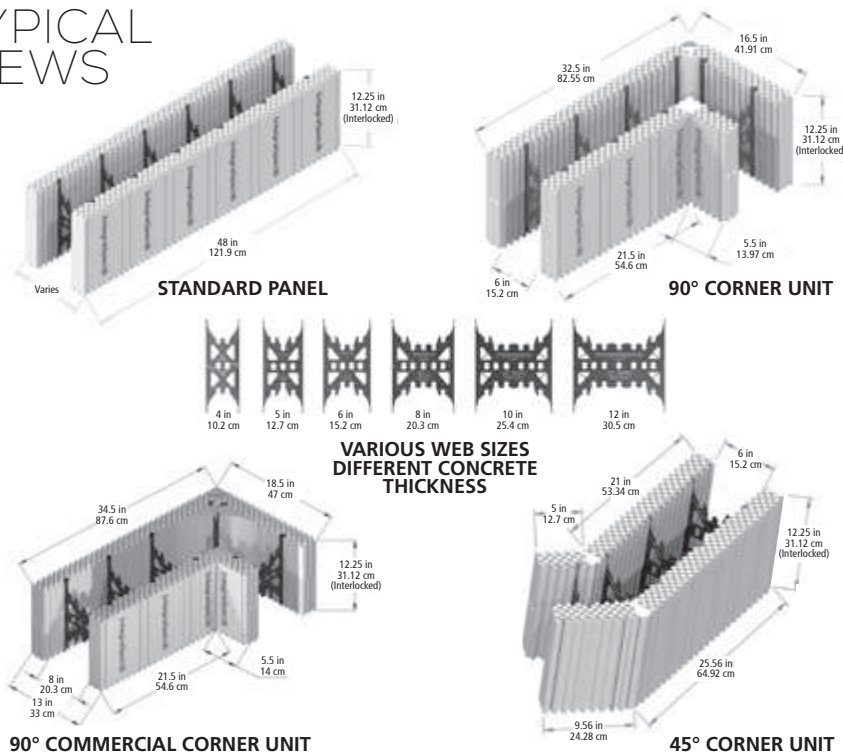
## FIRE RESISTANCE

- Flash ignition @ 705° F (374° C)
- Self ignition @ 842° F (450° C)
- Several hours of fire protection

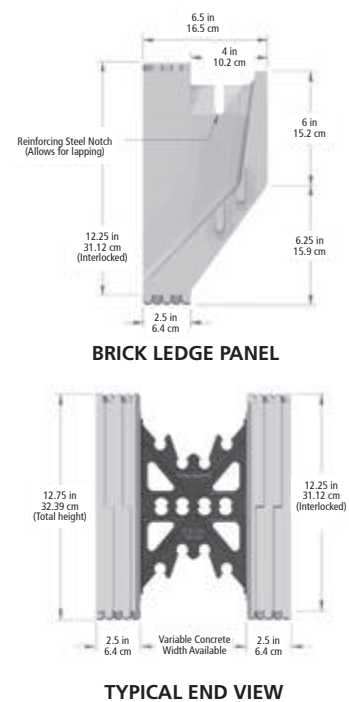
## POUR HEIGHT

- Up to 10 ft, 3.1 m continuous pour

## TYPICAL VIEWS



## END VIEWS



Insulating Concrete Form (ICF) Building System  
Head Office: 1-800-382-9102

INTEGRASPEC.COM    

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