

# Product Information Bulletin 227

## **Built Green Alberta**



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# EPS Product Solutions

BULLETIN NO. 227

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REPLACES: NEW

### Built Green Alberta

Built Green™ Alberta, an industry driven initiative, was launched in October 2003 by the CRHBA Built Green™ Volunteer Committee that includes representation from member builders, manufacturers, developers, supplier and trade representatives, government, educational institutes, and provincial program delivery agents.

Members of the Calgary Region Home Builders Association (CRHBA) were interested in becoming a more environmentally responsible industry and offering consumers more energy efficient homes. The CRHBA, spearheaded by Jay Westman of Jayman Homes, and in conjunction with the Southern Alberta Institute of Technology (SAIT), set out to explore the possibility of adopting in part or whole the Built Green™ Colorado new home building model. Built Green™ Colorado had become the most successful program of its kind in the USA.

Plasti-Fab insulation products and systems can be used to assist builders in meeting the energy efficiency goals that are established with the program. The attached list, excerpted from the Built Green checklist, highlights the specific items from the checklist where Plasti-Fab products would be applicable:

- 1) PlastiSpan M-24 Insulation Board:
  - a) Foundation wall and slab insulation:
    - i) Section I – EnerGuide Ratings – items 23, 24 and 25.
    - ii) Section II – Operational Systems – item 13.
    - iii) Section V – Indoor Air Quality – item 13 (EcoLogo<sup>?</sup> Program listing).
  - b) Above-grade wall insulation:
    - i) Section I – EnerGuide Ratings – items 6, 7, 8, 9 and 11.
    - ii) Section II – Operational Systems – item 18.
    - iii) Section III – Building Materials – items 9 and 10
      - (1) Note items 30 and 33 relate recycled content which is dealt with under the EcoLogo<sup>?</sup> Program listing for Plasti-Fab EPS insulation material.
    - iv) Section V – Indoor Air Quality – item 13 (EcoLogo<sup>?</sup> Program listing).
- 2) Advantage ICF System:
  - a) Foundation wall insulation:
    - i) Section I – EnerGuide Ratings – items 23, 24 and 25.
    - ii) Section III – Building Materials – items 1, 2, 9 and 10.
    - iii) Section V – Indoor Air Quality – item 13 (EcoLogo<sup>?</sup> Program listing).
  - b) Above-grade wall insulation:
    - i) Section I – EnerGuide Ratings – items 6, 7 and 8.
    - ii) Section II – Operational Systems – item 18.
    - iii) Section III – Building Materials – items 9 and 10
      - (1) See note above regarding items, 30 and 33.
    - iv) Section V – Indoor Air Quality – item 13 (EcoLogo<sup>?</sup> Program listing).
- 3) PlastiSpan SIP System:
  - a) Above-grade wall insulation:
    - i) Section I – EnerGuide Ratings – items 6, 7 and 8.
    - ii) Section II – Operational Systems – item 18.
    - iii) Section III – Building Materials – items 9 and 10
      - (1) See note above regarding items, 30 and 33.
    - iv) Section V – Indoor Air Quality – item 13 (EcoLogo<sup>?</sup> Program listing).

See attached excerpt from Built Green checklist for additional details on applications.



**Built Green Alberta™ Checklist 2003**  
October 1<sup>st</sup>, 2003

Point Value

Selected Points

Documents Required at Time of Random Rating

The Built Green™ Alberta program has three levels of achievement, shown below as bronze, silver and gold. Points are awarded based on the minimum *EnerGuide* rating with additional points selected from each of the six other areas of the checklist to give a cumulative total. Each separate category has minimum point totals that must be selected.

<b>BRONZE LEVEL: <i>EnerGuide</i> Rating OF 72, with additional 60 points selected from the checklist for a total of 80</b>	20		
<b>SILVER LEVEL: <i>EnerGuide</i> Rating OF 75, with additional 65 points selected from the checklist for a total of 90</b>	25		
<b>GOLD LEVEL: <i>EnerGuide</i> Rating of 77, with additional 70 points selected from the checklist for a total of 100</b>	30		

**I. ENERGUIDE RATING:**

This rates the energy efficiency and energy consumption of the home using the *EnerGuide* for New Houses software. Information such as home orientation, home dimensions, insulation values, type of heating system, construction material, window type and window design are input into the software in order to calculate a rating. An average rate of air changes per hour (ACH) is initially used for the calculation. Prior to completion of each house, a mandatory blower door test is performed and the actual rate of air changes per hour is then input into the software and the final *EnerGuide* rating is calculated. The following list provides examples of the types of questions asked by the software program.

**Please check which items you have selected in the “selected points” column**

6.	Exterior Wall Insulation R-20 Batt and R 3.8 Insulating Sheathing			
7.	Exterior Wall Insulation R-20 Batt and R 4.4 Insulating Sheathing			
8.	Exterior Wall Insulation R-20 Batt and R 6 Insulating Sheathing			
9.	Exterior Wall Insulation R-20 Batt and R 7.4 Insulating Sheathing			
10.	Exterior Wall Insulation R-20 Batt and R 12 Insulating Sheathing			
23.	Exterior Foundation Insulation, Specify type and R Value			
24.	Install R-08 full height interior basement wall insulation			
25.	Install R-12 full height interior basement wall insulation			
26.	Install R-20 full height interior basement wall insulation			

**II. OPERATIONAL SYSTEMS:**

MINIMUM of 13 POINTS TO BE SELECTED. This section awards points for construction methods and types of products that contribute toward lower energy consumption as well as alternative heating and electrical systems.

**Please write the point value of the selected items in the “selected points” column.**

**Please tally the total points in each section in the space provided.**

13.	Minimum of R 8 insulation installed under basement slab	2		Spec Sheet
18.	Attached garage is fully insulated	1		Spec Sheet
<b>OPERATIONAL SYSTEMS SECTION POINT TOTALS</b>				

**III. BUILDING MATERIALS:**

MINIMUM of 12 POINTS to be selected. This section deals with building components that make up the structure of the home. Items involve alternatives to using large dimensional lumber, products with a recycled component, utilizing wood products that come from sustainable managed forests and reducing the overall amount of lumber used.

**Please write the point value of the selected items in the “selected points” column.**

**Please tally the total points in each section in the space provided.**

1.	Insulated Concrete Forming system (ICF's) used for foundation walls	3		Spec Sheet
2.	Insulated Concrete Forming system (ICF's) used for main house walls	4		Spec sheet
4.	Non-solvent based damp proofing (seasonal application)	1		Product data
5.	Air gap membrane foundation wrap	1		Spec sheet
9.	Use of insulated headers (either manufactured or site built open insulated single headers) with minimum insulation value of R8	1		Spec Sheet
10.	Install manufactured insulated rim/band joist or build on site by setting back joists to allow rigid insulation filler.	2		Spec Sheet
18.	Structural insulated panel system used for walls or roofs, two points for each application (SIPS)	2		Trade/Supplier letter
30.	Recycled content exterior wall sheathing (minimum 50% pre or post consumer)	2		Product data/Invoice
33.	All insulation used in home is certified by a third party to contain at least 40% recycled content	1		Product data/Invoice-Letter

**V. INDOOR AIR QUALITY:**

MINIMUM of 12 POINTS to be selected. This section focuses on the quality of the air within the finished home. Products listed here include materials that are low in VOC's, products made from all natural materials as well as various air cleaning and ventilation systems.

**Please write the point value of the selected items in the “selected points” column.**

**Please tally the total points in each section in the space provided.**

9.	Install passive Heat Recovery Ventilator (HRV)	2		Spec sheet
13.	All insulation in the home is Green Guard Certified or certified as formaldehyde free	2		Manufacturer Letter

**VI. WASTE MANAGEMENT:**

MINIMUM of 7 POINTS to be selected. This section deals with the handling of waste materials on the construction site and encourages recycling.

**Please write the point value of the selected items in the “selected points” column.**

**Please tally the total points in each section in the space provided.**

1.	Comprehensive recycling Program for building site including education, site signage and bins.	2		Field Verification
3.	Minimum 25% (by weight) of waste materials collected from construction site are diverted from waste stream	2		Trade Letter
4.	Minimum 50% (by weight) of waste materials collected from construction site are diverted from waste stream	4		Trade Letter
<b>WASTE MANAGEMENT SECTION POINT TOTALS</b>				
<b>BUILT GREEN™ ALBERTA CHECKLIST TOTAL</b>				