COM*check* Software Version 3.9.3

Envelope Compliance Certifi

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 10/07/14

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title :

Construction Site:

Owner/Agent:
Peter Holmes
P.H. Warren Avenue, LLC
421 Warren Avenue
Portland, ME 04103

Designer/Contractor:
Biskup Construction, Inc.
16 Danielle Drive
Windham, ME 04062
207-892-9800

Section 2: General Information

Building Location (for weather data):	**Portland, Maine**
Climate Zone:	**6a**
Building Space Conditioning Type(s):	**Nonresidential**
Vertical Glazing / Wall Area Pct.:	**5%**

Activity Type(s)	Floor Area
Manufacturing Facility	25040

Section 3: Requirements Checklist

Envelope PASSES: Design 2% better than code

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor(a)
Roof 1: Other Metal Building Roof (b) Comments: ASHRAE Table A2.3 Liner with R-11+R-19 (no thermal block)	25040	---	---	0.040	0.049
2'-8"" high concrete kicker walls: Solid Concrete:8" Thickness,Normal Density , Furring: Metal	1197	0.0	5.0	0.131	0.080
Insulated holow metal door: Insulated Metal, Swinging Comments: ASHRAE A7.1 Insulated pass door	11	---	---	0.500	0.700
Steel builiding walls: Other Metal Building Wall (b) Comments: ASHRAE TABLE A3.2 6" Metal Bldg. Insulation	14014	---	---	0.084	0.069
Marvin Ultrex Ins. windows: Vinyl Frame, Perf. Type: Other testing/cert. Product ID: MAR-N-326-00026-00001, SHGC 0.33 (c) Comments: See attached product data sheet	648	---	---	0.310	0.350
Insulated holow metal door: Insulated Metal, Swinging Comments: ASHRAE A7.1 Insulated pass door	117	---	---	0.500	0.700
Full Glass Entry Door: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Type: Energy code default, Double Pane with Low-E, Clear , SHGC 0.70 Comments: ASHRAE A8.2	65	---	---	0.800	0.800
Haas Overhead Doors: Insulated Metal, Non-Swinging Comments: See attached product data sheet	894	---	---	0.062	0.500
Split Faced Block: Concrete Block:8", Partially Grouted, Cells Empty,Normal Density , Furring: None	1232	---	0.0	0.550	0.080
Insulated holow metal door: Insulated Metal, Swinging Comments: ASHRAE A7.1 Insulated pass door	88	---	---	0.500	0.700

Full Glass Entry Door: Glass (> 50% glazing):Metal Frame, Perf. Type: Energy code default, Double Pane with Low-E, Clear , SHGC 0.70	55	---	---	(
Comments: ASHRAE A8.2				
Floor 1: Slab-On-Grade:Unheated, Horizontal without vertical 4 ft.	820	---	10.0	

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

(b) 'Other' components require supporting documentation for proposed U-factors.

(c) Fenestrations product performance must be certfied in accordance with NFRC and requires supporting docume

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Air Leakage, Component Certification, and Vapor Retarder Requirements:

- [x] 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- [x] 2. Windows, doors, and skylights certified as meeting leakage requirements.
- [x] 3. Component R-values & U-factors labeled as certified.
- [x] 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- [x] 5. 'Other' components have supporting documentation for proposed U-Factors.
- [x] 6. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- [x] 7. Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
- [x] 8. Cargo doors and loading dock doors are weather sealed.
- [x] 9. Recessed lighting fixtures installed in the building envelope are Type IC rated as meeting ASTM E283, are sealed with gasket or caulk.
- [x] 10. Building entrance doors have a vestibule equipped with self-closing devices.

  Exceptions:

  - [x] Building entrances with revolving doors.
  - [x] Doors not intended to be used as a building entrance.
  - [x] Doors that open directly from a space less than 3000 sq. ft. in area.
  - [x] Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.
  - [x] Doors opening directly from a sleeping/dwelling unit.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 2009 IECC requirements in COM*check* Version 3.9.3 and to comply with the mandatory requirements in the Requirements Checklist.

Jim Biskup Pres.		7/14/14
Name - Title	Signature	Date

COMME

Calc

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Haas Door Company
Model CHT-716
1 3/4" V-groove Wood Grain Steel Insulated Door

These details and suggested specifications are to be used for: Model CHT-716

- Steel Sections-Insulated, with 16ga. Galvanized Steel End Stiles
- 1 3/4" (44.5mm) Thick Sections
- 3" (76.2mm) V-groove pattern—wood grain inside and outside
- Tongue and groove section joint
- Available Colors:

Polar White	Brown	Almond	Sahara Tan	Sand stone	Gray	Hunter Green	Bronze	Trinar® White	Trinar® Beige	Trinar® Brown

Trinar colors carry a 35 year paint warranty
Colors are not exact due to the differences in screen resolutions and printer calibrations. For accurate color samples, contact Haas Door for a color selector.

Exterior View

Interior View

Cross Section*

**For thickness representation only.*
Photo may not match model stile.

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PART 1 GENERAL

1.1 SECTION INCLUDES

A. Type: Sectional Doors are to be Model CHT-716 as manufactured by Haas Door Company.

B. Operation: to be manual / motor operated

C. Mounting: to be Interior Face Mounted on a prepared surface.

1.2 Related Work

A. Opening preparation, miscellaneous or structural steel, access panels, finish or field painting are in the scope of the work of other sections or trades.

PART 2 PRODUCT

2.1 MATERIALS & CONSTRUCTION

A. Sections: shall be 1.75" (44.5mm) thick roll formed 26 gauge inside and outside, hot-dipped galvanized steel, insulated with high density polyurethane foam. Sections shall have v-grooved wood-grain textured interior and exterior.

B. Insulation: fully insulated section using high density CFC free polyurethane foam, pressure injected to completely fill the section, providing a composite structure that is of exceptional strength and rigidity. The insulated sections provide exceptional insulation properties. Calculated R value = 16.18, U value = .062

C. End Stiles: shall be 16 gauge hot-dipped galvanized steel, installed over vinyl end caps to maintain the thermal break.

D. Intermediate Reinforcing: to be nominal 18 gauge steel back-up plates, inserted prior to foaming, to provide proper position and reinforcing for attachment of various hardware.

E. Bottom Section: with full length, vinyl astragal retainer. Weather strip to be "U" shaped flexible extruded vinyl.

F. Thermal Break: vinyl top and bottom caps on each section form the horizontal section joints, providing a complete thermal break.

G. Header Seal: a top header vinyl seal is factory furnished for the top section.

H. Finish Coat: section with a two-coat finish painting process consisting of a urethane primer and a tough polyester finish. Color: Almond, Bronze, Brown, Gray, Hunter Green, Sahara Tan, Sandstone, White, Trinar® Beige, Trinar® Brown, Trinar® White.

I. Wind Load Rated Doors: Doors are built to meet or exceed standards established by ANSI/DASMA 102-2003.

2.2 COUNTERBALANCE SYSTEM

A. Counterbalance: is factory calibrated to match site conditions.

B. Springs: to be helical torsion type made from oil tempered wire. 10,000 cycle is standard.

C. Assembly: torsion springs to be mounted on a coupled solid steel shaft or continuous heavy wall tubular steel shaft depending on door size and method of operation. Cable drums are die cast aluminum, and cables are high strength galvanized aircraft quality with minimum 8 to 1 safety factor.

2.3 TRACKS

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A. Vertical Tracks: to be minimum of 16 gauge galvanized steel tapered and mounted foı Angle mount is standard.

B. Horizontal Tracks: to be minimum 16 gauge galvanized steel, reinforced with minimun angles as required (2" or 3" track depending on door size).

2.4 HARDWARE

A. Hinges: to be manufactured of hot-dipped galvanized steel, 14 gauge minimum. Double end hinges are supplied on doors 18'-0" and wider.

B. Rollers: to be full floating ball bearing in case-hardened steel races, mounted to fit the slope of the track.

2.5 LOCKING

A. Slide Bar Lock: to be inside spring loaded on end stile and shall engage slot in track.

PART 3 Execution

3.1 INSTALLATION

A. Installation: to be by Haas Door authorized representative and in accordance with Haas standards and installation instructions.

OPTIONAL FEATURES

Choice of Track Lift Types
- Standard Lift
- Low Headroom
- High Lift
- Vertical Lift

2" or 3" Track
Double Steel End Stiles
Exhaust Port(s)
Cam Safety Device
Spring Bumpers
Chain Hoist
High Cycle Springs
Wind load Rating
Glazing (Lites)
High Cycle Rollers
Aluminum Full View Section
Pass Door

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Integrity
from MARVIN
Windows and Doors

ENERGY STAR® Qualified in Highlighted Regions

ENERGY STAR

NFRC
National Fenestration Rating Council®
CERTIFIED

All Ultrex Glider
FG/FG
Horizontal Slider
11/16" IG LOE 272 ARGON
3.1mm LoE 272 / 11.5mm argon / 3.1mm clr

.0045 SS – D

MAR – N – 363 – 00026 – 00001

ENERGY PERFORMANCE RATINGS

U-Factor	Solar Heat Gain Coefficient
0.31 (U.S./I-P)	0.33

ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance
0.57

Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturers literature for other product performance information. www.nfrc.org

Meets or exceeds C.E.C. Air Infiltration Standards

WINDOW & DOOR MANUFACTURERS ASSOCIATION
WDMA
Hallmark Certified
www.wdma.com

Licensee #407 – H –988
Integrity All Ultrex Glider

Manufacturer stipulates conformance as indicated below

AAMA/WDMA/CSA/101/ I.S.2/A440 – 08	LC – PG40 1816X1067 mm (71.5X41.5 in) LC – PG40 DP +40/ – 40
AAMA/WDMA/CSA/101/ I.S.2/A440 – 05	HS – LC40 1816X1067 DP +40/ – 40

product may be covered by one or more of the following patents: 5115590, 5125442, 7591106

02849593 1 16D744 A1

Visit www.integritywindows.com/patents for pending patents.
Do not remove this label prior to inspection and save for future reference.

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