

P1 Requirements Specification

Phase One of the Service Learning Project

Title: Project XS

1.0 Introduction

This document specifies all the requirements for P1. Note that 2 more additional documents will be provided for the second and third phases.

2.0 Requirements

2.1 External Interface Requirements

2.1.1 User Interfaces

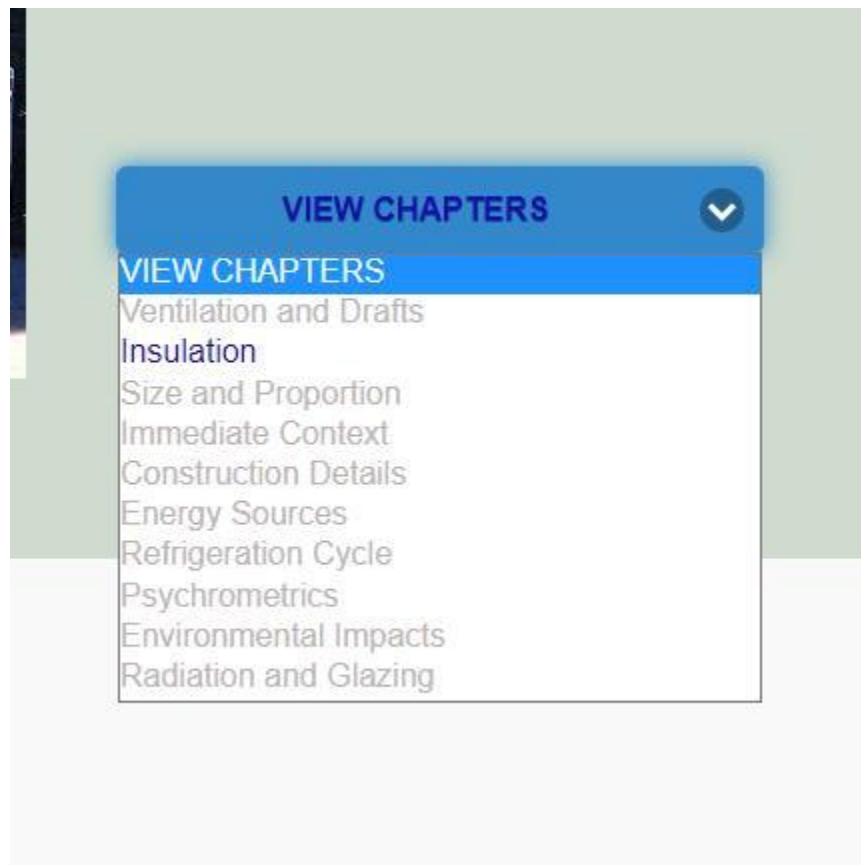
2.1.1.1 Home Page

Figure 2.1.1.1



2.1.1.2 Home Page Menu

Figure 2.1.1.2



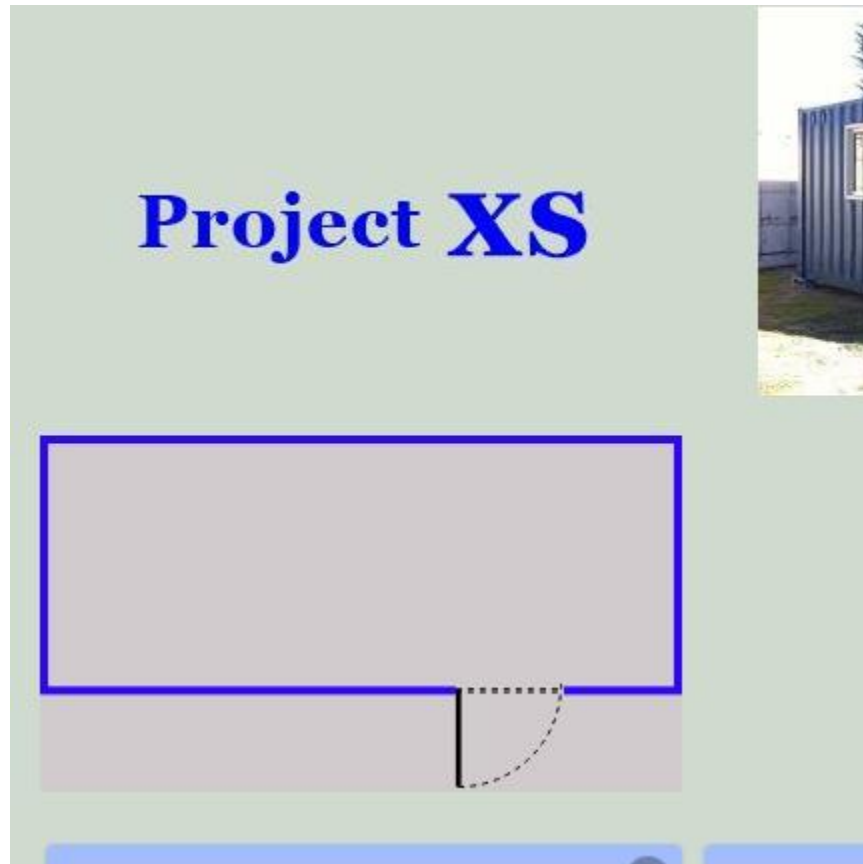
2.1.1.3 Selection of Insulation Option

Figure 2.1.1.3



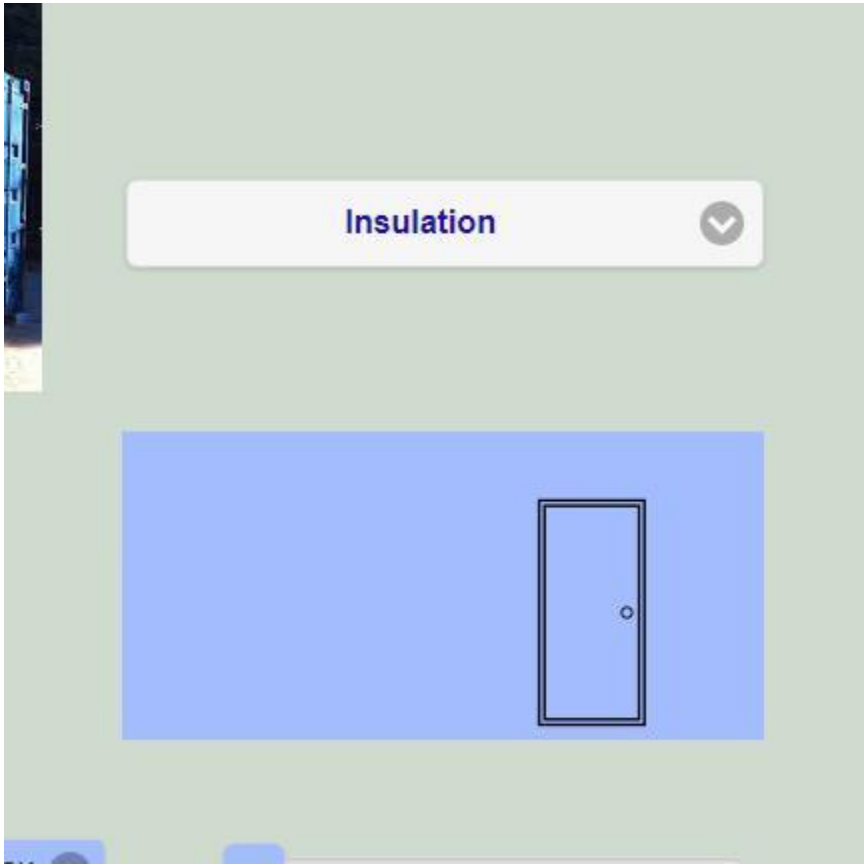
2.1.1.4 Plan View

Figure 2.1.1.4



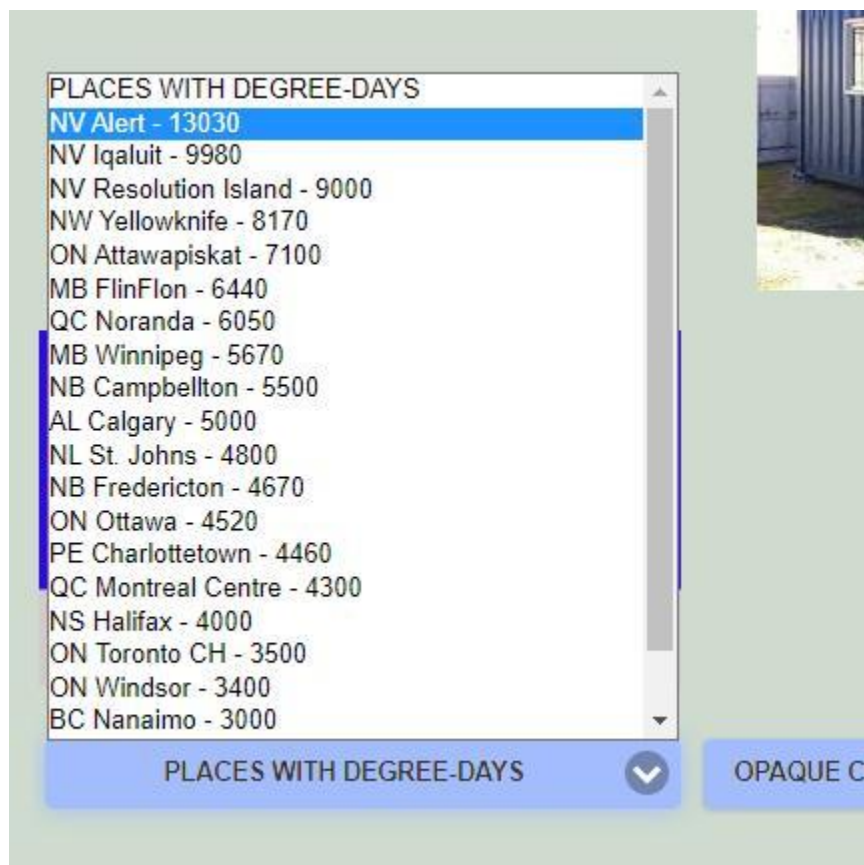
2.1.1.5 Elevation View

Figure 2.1.1.5



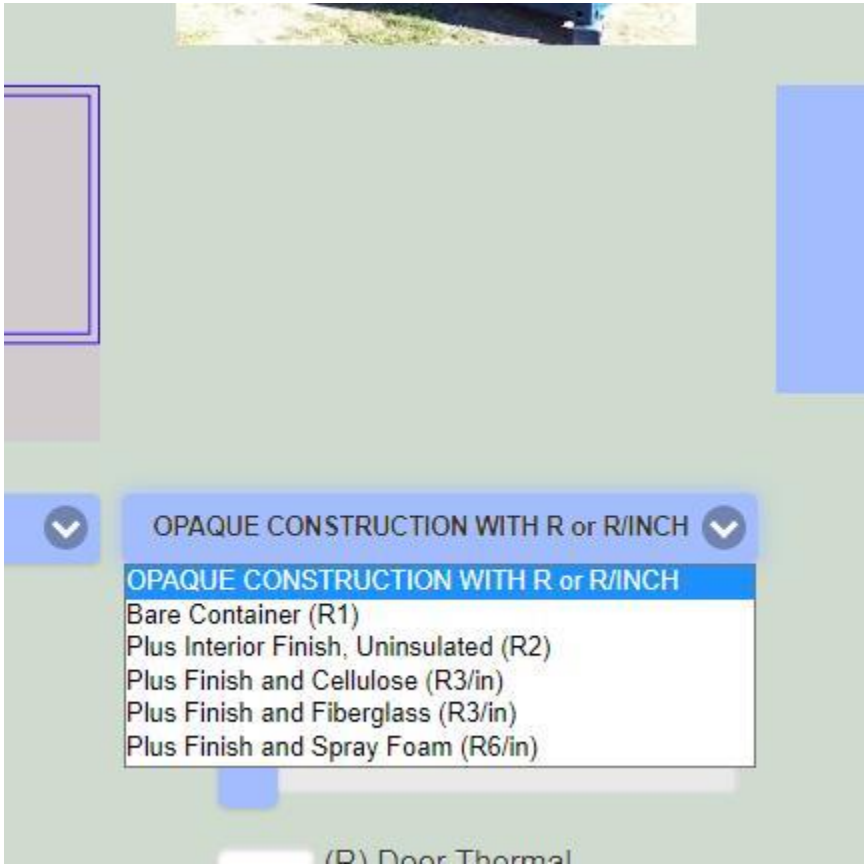
2.1.1.6 PLACES WITH DEGREE-DAYS Menu

Figure 2.1.1.6



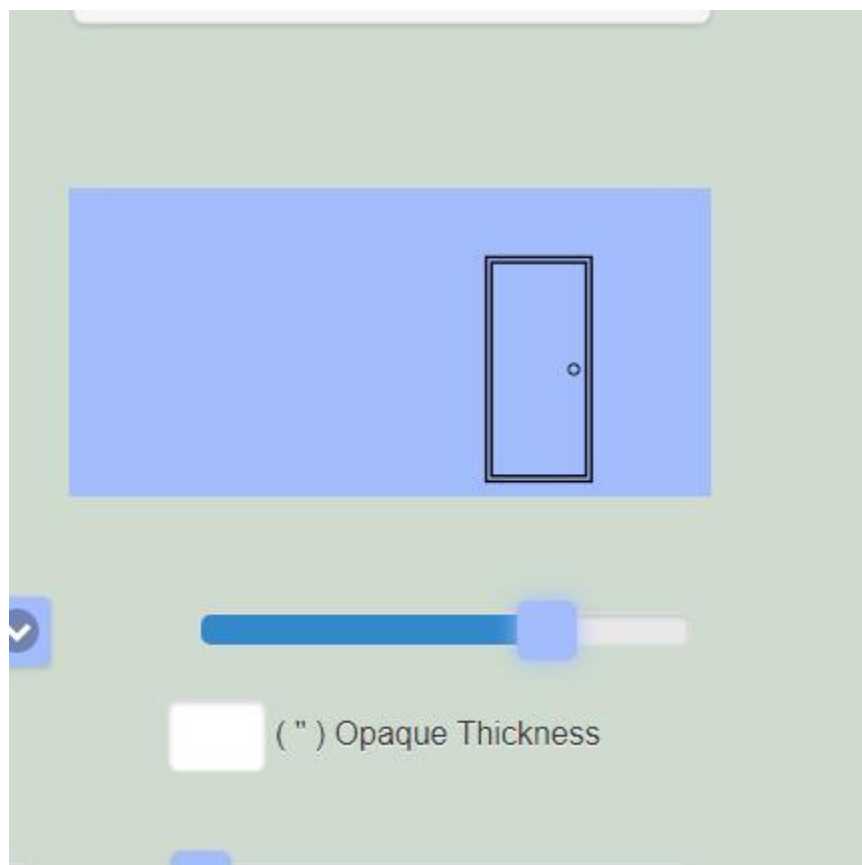
2.1.1.7 OPAQUE CONSTRUCTION WITH R or R/INCH Menu

Figure 2.1.1.7



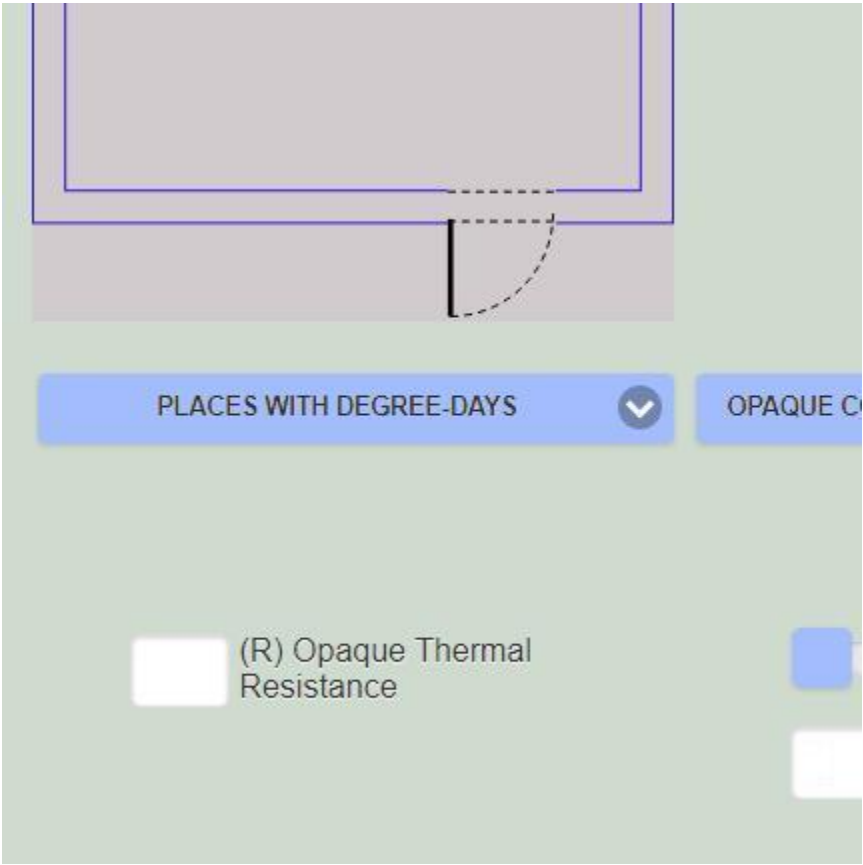
2.1.1.8 (") Opaque Thickness Slider

Figure 2.1.1.8



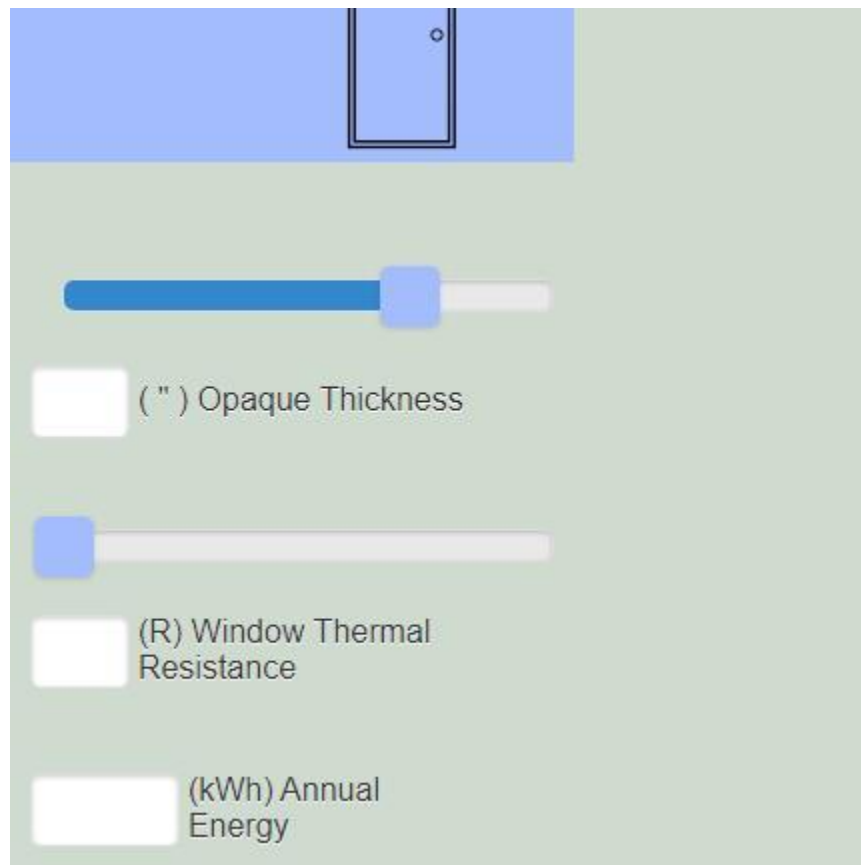
2.1.1.9 (R) Opaque Thermal Resistance Readout

Figure 2.1.1.9



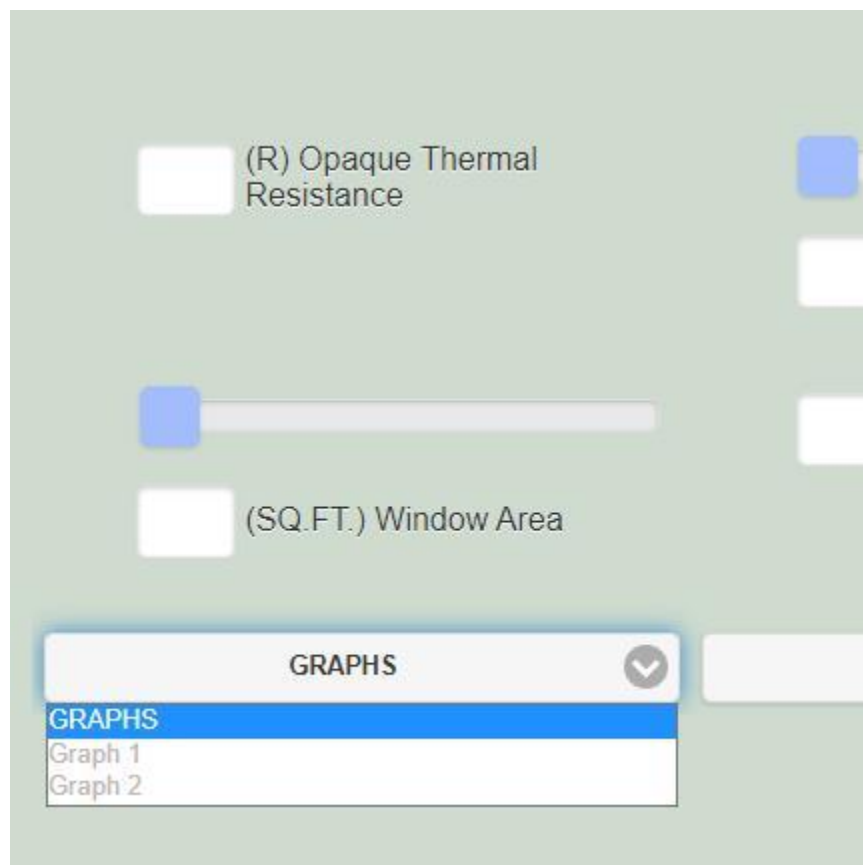
2.1.1.10 (kWh) Annual Energy Readout

Figure 2.1.1.10



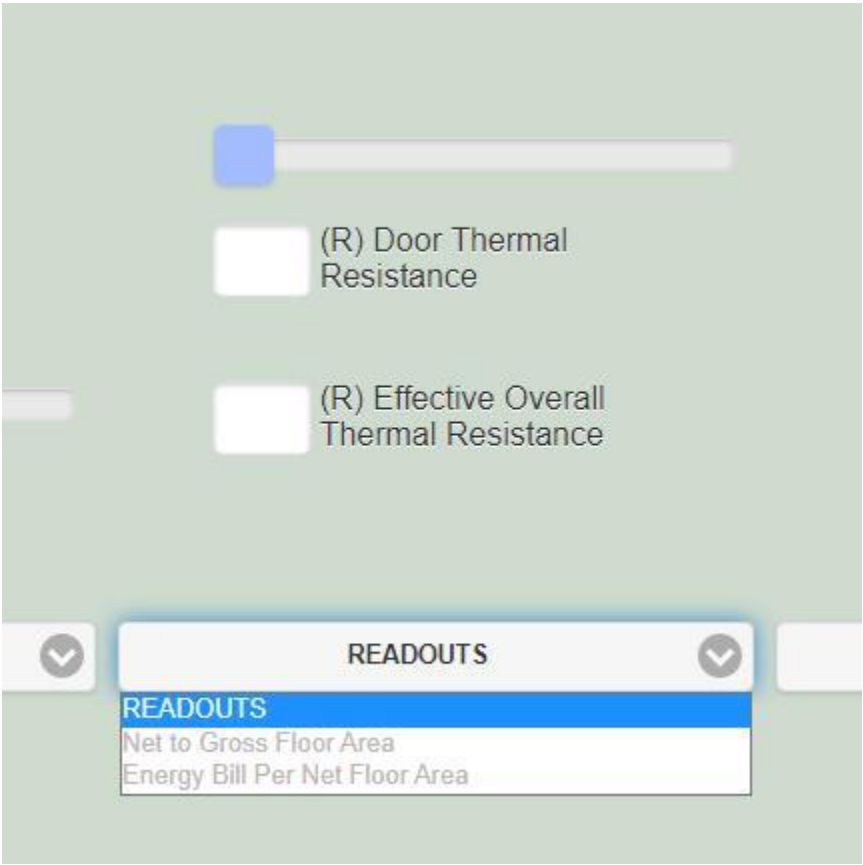
2.1.1.11 GRAPHS Menu

Figure 2.1.1.11



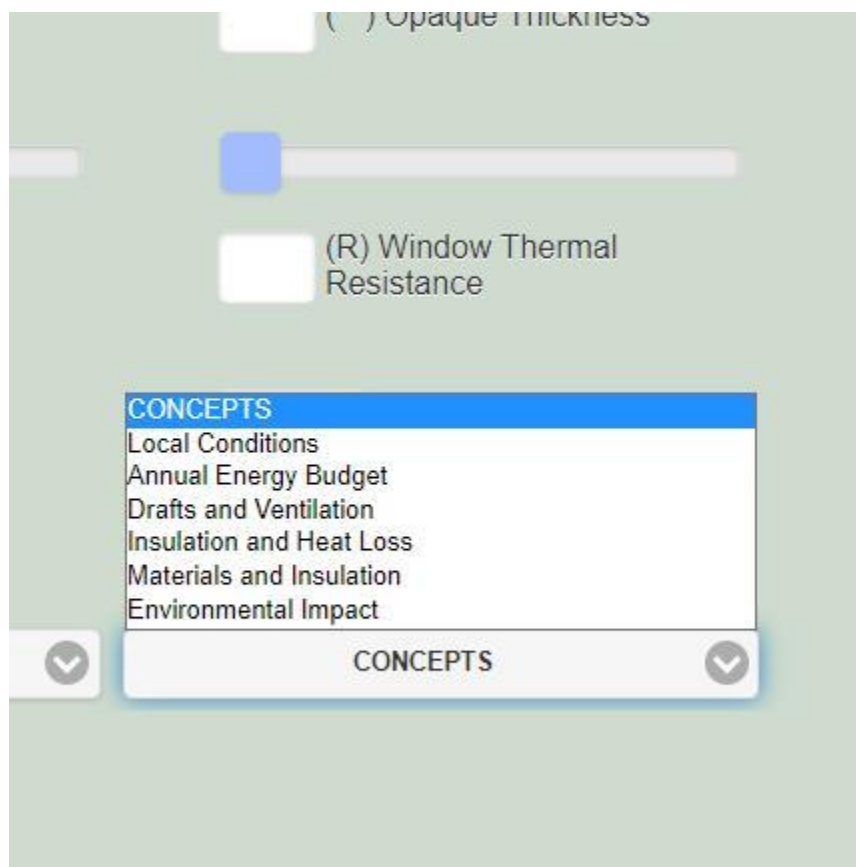
2.1.1.12 READOUTS Menu

Figure 2.1.1.12



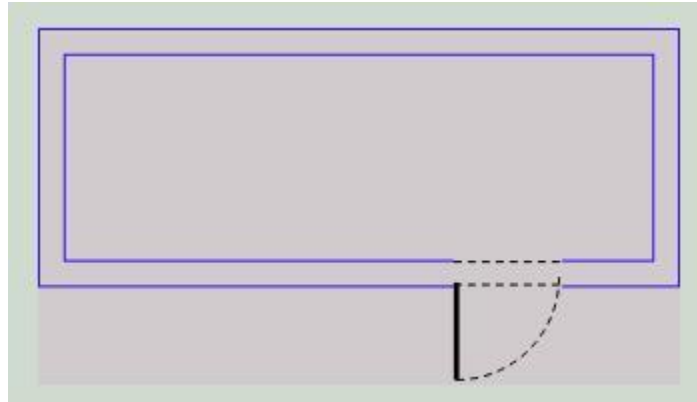
2.1.1.13 CONCEPTS Menu

Figure 2.1.1.13



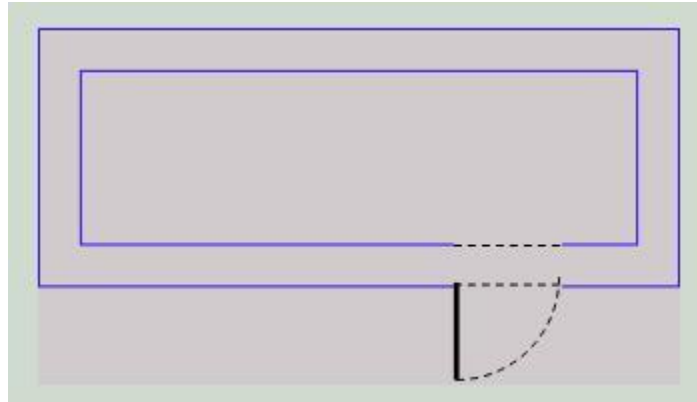
2.1.1.14 Plan View (Opaque Thickness at half, OPAQUE CONSTRUCTION WITH R or R/INCH at first option)

Figure 2.1.1.14



2.1.1.15 Plan View (Opaque Thickness at full, OPAQUE CONSTRUCTION WITH R or R/INCH at first option)

Figure 2.1.1.15



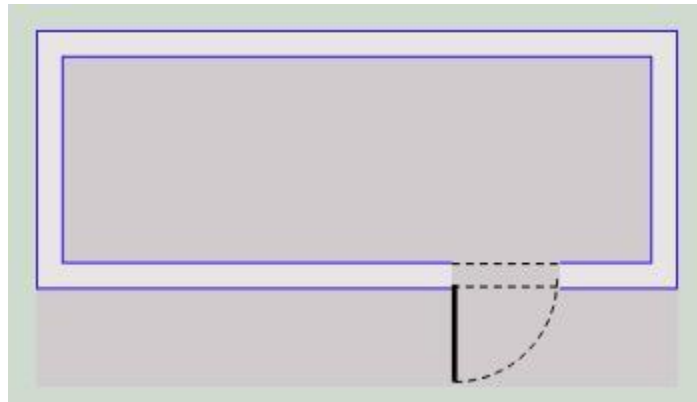
2.1.1.16 Plan View (Opaque Thickness at half, OPAQUE CONSTRUCTION WITH R or R/INCH at second option)

Figure 2.1.1.16



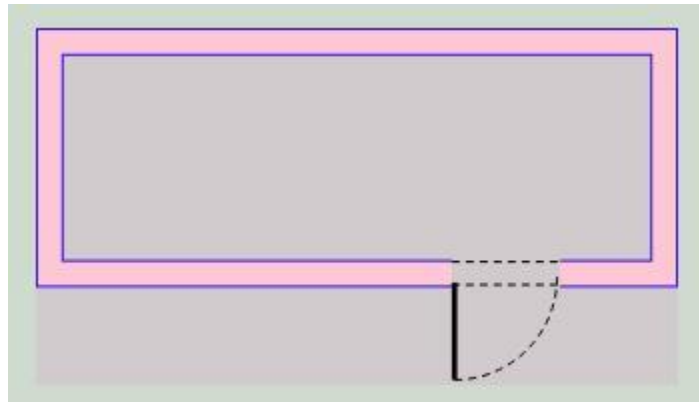
2.1.1.17 Plan View (Opaque Thickness at half, OPAQUE CONSTRUCTION WITH R or R/INCH at third option)

Figure 2.1.1.17



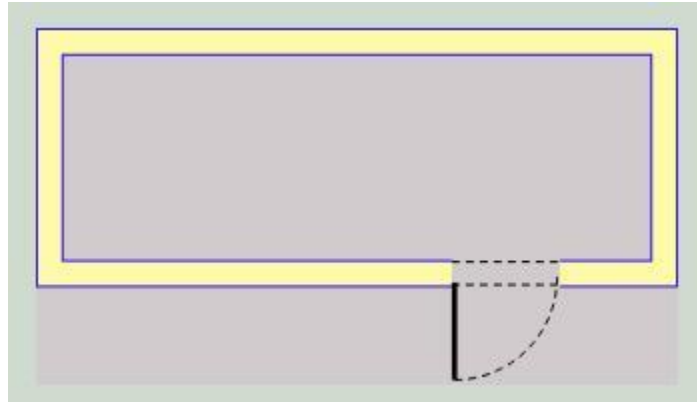
2.1.1.18 Plan View (Opaque Thickness at half, OPAQUE CONSTRUCTION WITH R or R/INCH at fourth option)

Figure 2.1.1.18



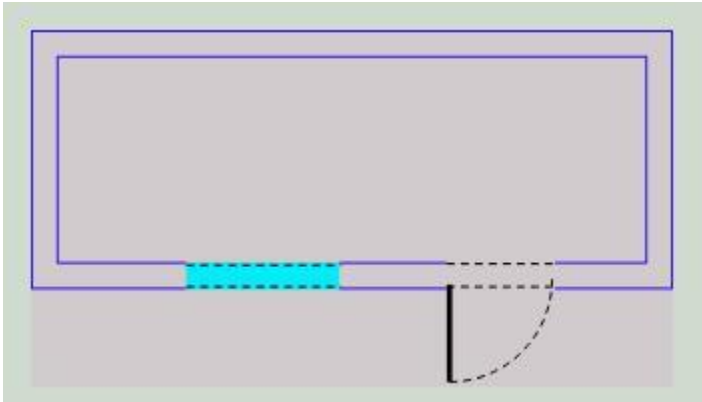
2.1.1.19 Plan View (Opaque Thickness at half, OPAQUE CONSTRUCTION WITH R or R/INCH at fifth option)

Figure 2.1.1.19



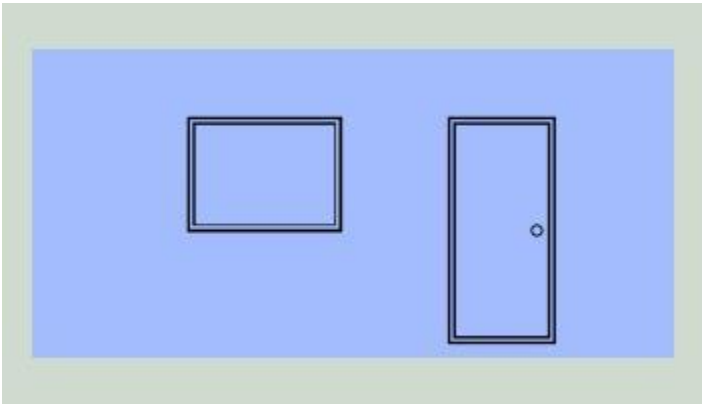
2.1.1.20 Plan View (Opaque Thickness at half, OPAQUE CONSTRUCTION WITH R or R/INCH at first option, Window Area at half)

Figure 2.1.1.20



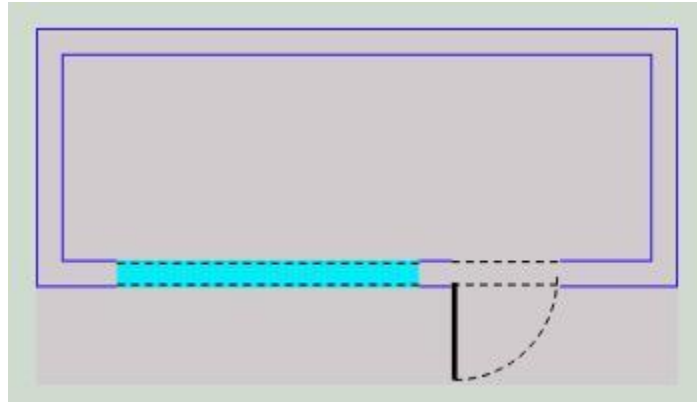
2.1.1.21 Elevation View (Window Area at half)

Figure 2.1.1.21



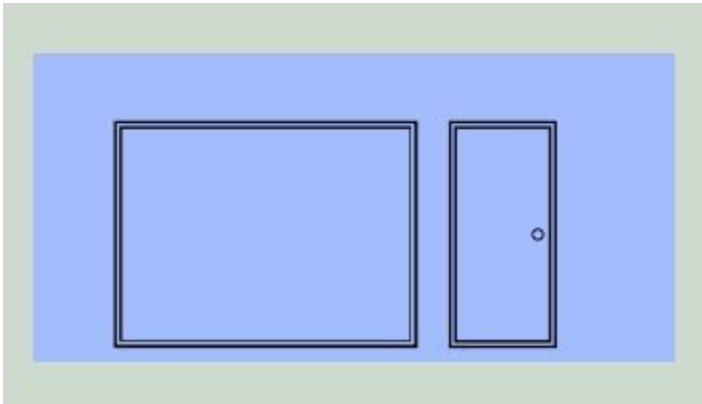
2.1.1.22 Plan View (Opaque Thickness at half, OPAQUE CONSTRUCTION WITH R or R/INCH at first option, Window Area at full)

Figure 2.1.1.22



2.1.1.23 Elevation View (Window Area at full)

Figure 2.1.1.23



2.2 Functional Requirements

2.2.1 P1

[P1 – 1] Upon re-selecting VIEW CHAPTERS in the menu in Figure 2.1.1.2 the screen shall appear as in Figure 2.1.1.1.

[P1 – 2] VIEW CHAPTERS appears as blue in the menu in Figure 2.1.1.2.

[P1 – 3] Insulation appears as blue in the menu in Figure 2.1.1.2.

[P1 – 4] All options other than VIEW CHAPTERS and Insulation appear as grey in the menu in Figure 2.1.1.2.

[P1 – 5] When Insulation is selected the screen in Figure 2.1.1.3 appears below the screen in Figure 2.1.1.1. Both are visible.

[P1 – 6] All screen elements are ordered according to Figure 2.1.1.1 and Figure 2.1.1.3.

[P1 – 7] The shipping container is 19 feet, 10 inches long.

[P1 – 8] The shipping container is 8 feet wide.

[P1 – 9] The shipping container is 9 feet, 6 inches in height.

[P1 – 10] The door is 6 feet, 8 inches tall.

[P1 – 11] The door is 3 feet wide.

[P1 – 12] The floor is 7 inches thick.

[P1 – 13] The walls are initially 2 inches thick.

[P1 – 14] The outer wall is blue (#3104fb) as in Figure 2.1.1.4.

[P1 – 15] The inner wall is blue (#3104fb) as in Figure 2.1.1.4.

[P1 – 16] The floor is grey (#d2cbcd) as in Figure 2.1.1.4.

[P1 – 17] The bottom of the door appears at the 7-inch mark as in Figure 2.1.1.5.

[P1 – 18] The door frame can go below the 7-inch mark as in Figure 2.1.1.5.

[P1 – 19] The colour of the elevation is blue (#a3bcfd) as in Figure 2.1.1.5.

[P1 – 19] The options for the PLACES WITH DEGREE-DAYS menu in Figure 2.1.1.6 are:

PLACES WITH DEGREE-DAYS

NV Alert - 13030

NV Iqaluit - 9980

NV Resolution Island - 9000

NW Yellowknife - 8170

ON Attawapiskat - 7100

MB FlinFlon - 6440

QC Noranda - 6050

MB Winnipeg - 5670

NB Campbellton - 5500

AL Calgary - 5000

NL	St. Johns - 4800
NB	Fredericton - 4670
ON	Ottawa - 4520
PE	Charlottetown - 4460
QC	Montreal Centre - 4300
NS	Halifax - 4000
ON	Toronto CH - 3500
ON	Windsor - 3400
BC	Nanaimo - 3000
BC	Vancouver - 2900
BC	White Rock - 2620

[P1 – 20] The GRAPHS menu in Figure 2.1.1.11 is greyed out except for the title GRAPHS.

[P1 – 21] The READOUTS menu in Figure 2.1.1.12 is greyed out except for the title READOUTS.

[P1 – 22] The slider at full in Figure 2.1.1.15 is 14 inches.

[P1 – 23] The colour of the insulation in Figure 2.1.1.17 is (#e8e5e4).

[P1 – 24] The colour of the insulation in Figure 2.1.1.18 is (#fec7d4).

[P1 – 25] The colour of the insulation in Figure 2.1.1.19 is (#fdfaaa).

[P1 – 26] The colour of the window in Figure 2.1.1.20 is (#07ebf8).