Indoor pollution control outdoor contaminants
TWO BUILDINGS IN ONE

Glassport Retirement Residence

New Wing

Existing School
TWO BUILDINGS IN ONE

Glassport

Retirement Residence
GLASSPORT GYM AREA WALL

Need for New Wall

1. Contractor wanted plumb surface for insulation attachment.
2. Contractor concerned about air sealing uneven wall surface.
3. Existing wall contained holes and protrusions.
4. Two plaster walls not in same plane.
GLASSPORT GYM AREA WALL

Demolition
GLASSPORT GYM AREA WALL

Demolition
GLASSPORT GYM AREA WALL

Demolition
GLASSPORT GYM AREA WALL

Evolution: Original Concept

![Diagram of GLASSPORT GYM AREA WALL showing Evolution: Original Concept]
GLASSPORT GYM AREA WALL

Evolution: New Concept

![Diagram of Exterior Wall Construction]

- **Existing Wall**
- **E6** Exterior Wall Cladding Over Existing Wall with Insulation

**Assembly no:** 02ud
**Building assembly description:** E6-REVISED (Existing Wall w/ Cavity Framing/Insulation & 4" Ext. Insulation)

**Heat transmission resistance**
- **Interior R₁:** 0.74
- **Exterior R₁:** 0.23

**Area section 1**
- EPS Type II: 4.20
- Plywood: 4.20
- Mineral Wool Batt: 4.00
- 2x4 stud 16" o.c.: 1.28
- Existing Masonry: 0.21

**Thickness ["]**
- EPS Type II: 4.00
- Plywood: 0.50
- Mineral Wool Batt: 3.50
- 2x4 stud 16" o.c.: 1.28
- Existing Masonry: 16.00

**Total R-value:** 33.7 [hr*ft²/F/°F]
GLASSPORT GYM AREA WALL

New Wall
GLASSPORT GYM AREA WALL

New Wall
GLASSPORT GYM AREA WALL

New Wall