Assignment Number: 3 Jonathan Ramirez

[Monday 2/3]

Assignment research items:

Project climate conditions

Average temperature characteristics of New York City, And Irvine California

Mean Temperature NYC: 52.6 CAL: 63

Heating Degree Days NYC: CAL:

JAN 1220 350

FEB 1066 290

MAR 964 214

APR 568 136

MAY 199 54

JUN 58 25

JUL 2 0

AUG 4 2

SEP 171 6

OCT 380 61

NOV 860 117

DEC 1157 267

TOTAL

Practical seasons NYC: 4 CAL: 2

Humidity NYC: 62.5 % CAL: 65 %

Precipitation NYC: 49.9 IN CAL: 14.3 IN

Temperature extremes records NYC: 106/-15 CAL: 111/25

IEESC climate zone NYC: Zone 4 CAL: Zone 3

Team Alberta

**Wall strategy:**

The wall strategy that team Alberta had is rainscreen with furring strips

**Wall address:**

Team Alberta Durability is Spray foam insulation with 2x4 wood studs and 1/2” plywood sheathing and 1/2” gypsum sheathing.

Air leakage: Continuous insulation

**Strategies:**

Building Paper, Air space, Spray foam insulation

**R-value:**

Building Paper = 0.06

Gypsum wall board sheathing 1/2" = 0.45

Hardier fiber cement panel 4’x8’= 0.48

Plywood furring strips 3/8" = 0.47

Plywood sheathing 1/2” = 0.62

Spray foam insulation with 2x4 wood studs @ 16o.c. =6.00

Total = 8.08

Air Space 1

Vapor Barrier 1

Team Austria

**Wall strategy:**

The wall strategy that team Austria had is rainscreen

**Wall address:**

Team Austria use Durability insulation with wood board sheathing: 25mm/0.98in.

**Air leakage:**

Continuous insulation

**Strategies:**

Air Barrier, vapor retarder

**R-value:**

Gypsum wall board sheathing 1/2" = 0.45

Plywood sheathing .98in = 1.20

Blown insulation cellulose with 2x4 wood studs @ 16o.c. =6.00

Wood wall covering .75in = 1.25

Total = 8.90

Air Space 1

Vapor Barrier 1