## Summary of Results versus Acceptance Ranges

### Thermal Fabric Low Mass Results

| index | Total_tests | TRNSYS18.05.0001 |
|---|---|---|
| Number Thermal Fabric Annual Heating Low Mass within range | 10 | 10 |
| Number Thermal Fabric Annual Cooling Low Mass within range | 11 | 11 |
| Total Within Range | 21 | 21 |
| Met Threshold | 18 Yes | |

### Thermal Fabric High Mass Results

| index | Total_tests | TRNSYS18.05.0001 |
|---|---|---|
| Number Thermal Fabric Annual Heating High Mass within range | 9 | 9 |
| Number Thermal Fabric Annual Cooling High Mass within range | 10 | 9 |
| Total Within Range | 19 | 18 |
| Met Threshold | 17 Yes | |

### Cooling Equipment Results

| index | Total_tests | TRNSYS18.05.0001 |
|---|---|---|
| Number Cooling Equip Total Energy Consumption within range | 14 | 14 |
| Total Within Range | 14 | 14 |
| Met Threshold | 12 Yes | |

### Heating Equipment Results

| index | Total_tests | TRNSYS18.05.0001 |
|---|---|---|
| Number Space Heating Equip - Total Furnace Input within range | 3 | 3 |
| Number Space Heating Equip - Total Fan Energy within range | 3 | 3 |
| Total Within Range | 6 | 6 |
| Met Threshold | 5 Yes | |

### Air-side Equipment Results

| index | Total_tests | TRNSYS18.05.0001 |
|---|---|---|
| Number HVAC Air Side Equip Pre-heating Coil Load within range | 3 | 3 |
| Number HVAC Air Side Equip Heating Coil Load within range | 1 | 1 |
| Number HVAC Air Side Equip Cooling Coil Total Load within range | 16 | 16 |
| Number HVAC Air Side Equip Cooling Coil Sensible Load within range | 16 | 16 |
| Number HVAC Air Side Equip Zone 1 Reheat Load within range | 9 | 9 |
| Number HVAC Air Side Equip Zone 2 Reheat Load within range | 9 | 9 |
| Total Within Range | 54 | 54 |
| Met Threshold | 48 Yes | |

## Thermal Fabric Low Mass Detailed Results versus Acceptance Ranges

### Annual Heating Load (MWh/yr)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| Case600 | 3.75 | 4.98 | 4.5 | TRUE |
| Case610-Case600 | -.14 | .29 | .09 | TRUE |
| Case620-Case600 | -.08 | .4 | .22 | TRUE |
| Case630-Case620 | .02 | .74 | .42 | TRUE |
| Case640-Case600 | -2.17 | -1.22 | -1.85 | TRUE |
| Case660-Case600 | -1.07 | -.16 | -.71 | TRUE |
| Case670-Case600 | .25 | 2.98 | 1.64 | TRUE |
| Case680-Case600 | -2.54 | -1.9 | -2.22 | TRUE |
| Case685-Case600 | .33 | .77 | .54 | TRUE |
| Case695-Case685 | -2.38 | -1.94 | -2.15 | TRUE |

### Annual Sensible Cooling Load (MWh/yr)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| Case600 | 5.0 | 6.83 | 5.78 | TRUE |
| Case610-Case600 | -2.26 | -.8 | -1.67 | TRUE |
| Case620-Case600 | -2.24 | -1.64 | -1.94 | TRUE |
| Case630-Case620 | -1.68 | -.77 | -1.27 | TRUE |
| Case640-Case600 | -.56 | .03 | -.3 | TRUE |
| Case650-Case600 | -1.54 | -.95 | -1.15 | TRUE |
| Case660-Case600 | -3.09 | -2.5 | -2.81 | TRUE |
| Case670-Case600 | .05 | .84 | .42 | TRUE |
| Case680-Case600 | .13 | .87 | .53 | TRUE |
| Case685-Case600 | 2.7 | 3.31 | 3.07 | TRUE |
| Case695-Case685 | -.21 | .44 | .19 | TRUE |

## Thermal Fabric High Mass Detailed Results versus Acceptance Ranges

### Annual Heating Load (MWh/yr)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| Case900 | 1.04 | 2.28 | 1.8 | TRUE |
| Case900-Case910 | -.52 | -.02 | -.32 | TRUE |
| Case920-Case900 | 1.51 | 1.92 | 1.79 | TRUE |
| Case930-Case920 | .2 | 1.15 | .78 | TRUE |
| Case940-Case900 | -.82 | -.37 | -.65 | TRUE |
| Case960-Case900 | .96 | 1.12 | 1.05 | TRUE |
| Case980-Case900 | -1.65 | -1.0 | -1.35 | TRUE |
| Case985-Case900 | .64 | .81 | .72 | TRUE |
| Case995-Case985 | -1.83 | -1.07 | -1.45 | TRUE |

### Annual Cooling Load (MWh/yr)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| Case900 | 2.35 | 2.6 | 2.27 | FALSE |
| Case900-Case910 | .35 | 1.74 | 1.08 | TRUE |
| Case920-Case900 | .08 | .48 | .28 | TRUE |
| Case930-Case920 | -1.19 | -.44 | -.88 | TRUE |
| Case940-Case900 | -.19 | .06 | -.06 | TRUE |
| Case950-Case900 | -2.0 | -1.56 | -1.62 | TRUE |
| Case960-Case900 | -1.81 | -1.27 | -1.48 | TRUE |
| Case980-Case900 | 1.09 | 1.41 | 1.25 | TRUE |
| Case985-Case900 | 3.52 | 4.18 | 3.85 | TRUE |
| Case995-Case985 | .63 | 1.15 | .95 | TRUE |

## Cooling Equipment Detailed Results versus Acceptance Ranges

| Annual Total Cooling Energy Consumption (kWh/yr) | | | | |
|---|---|---|---|---|
| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
| CE300 | 33497.44 | 37023.49 | 35119.85 | TRUE |
| CE310-CE300 | 2671.2 | 6197.25 | 4466.45 | TRUE |
| CE320-CE300 | 2609.51 | 6135.55 | 4546.26 | TRUE |
| CE330-CE320 | -766.31 | 2759.74 | 933.98 | TRUE |
| CE330-CE300 | 3697.43 | 7223.48 | 5480.23 | TRUE |
| CE340-CE300 | 3172.36 | 6698.4 | 5166.09 | TRUE |
| CE330-CE340 | -1392.77 | 2133.27 | 314.14 | TRUE |
| CE350-CE300 | -5354.02 | -1827.98 | -3318.8 | TRUE |
| CE360-CE300 | 18083.53 | 21609.58 | 20021.18 | TRUE |
| CE400-CE300 | -5782.76 | -2179.4 | -3268.16 | TRUE |
| CE410-CE300 | -5928.64 | -370.87 | -1522.75 | TRUE |
| CE420-CE300 | -3945.03 | -418.99 | -1732.7 | TRUE |
| CE430-CE300 | -4762.27 | -1236.23 | -2511.71 | TRUE |
| CE440-CE300 | -3693.69 | -167.64 | -1604.45 | TRUE |

## Heating Equipment Detailed Results versus Acceptance Ranges

| Furnace Input Energy (GJ) | | | | |
|---|---|---|---|---|
| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
| HE210 | 49.86 | 55.11 | 52.43 | TRUE |
| HE220-HE210 | -5.48 | -.23 | -2.85 | TRUE |
| HE230-HE220 | -9.1 | -3.86 | -6.15 | TRUE |

| Cumulative Fan Energy (kWh) | | | | |
|---|---|---|---|---|
| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
| HE210 | 272.2 | 316.34 | 292.08 | TRUE |
| HE220-HE210 | -37.57 | 6.58 | -15.44 | TRUE |
| HE230-HE220 | 179.46 | 223.6 | 204.95 | TRUE |

## Air-side Equipment Detailed Results versus Acceptance Ranges

### Preheat Coil Load (kWh/h)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| AE301 | 2.8 | 4.2 | 2.95 | TRUE |
| AE401 | 9.75 | 10.77 | 10.26 | TRUE |
| AE301-AE401 | -7.67 | -6.16 | -7.31 | TRUE |

### Heating Coil Load (kWh/h)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| AE201 | 7.94 | 8.78 | 8.36 | TRUE |

### Cooling Coil Total Load (kWh/h)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| AE205 | 1.82 | 2.01 | 1.91 | TRUE |
| AE245-AE205 | .2 | .39 | .3 | TRUE |
| AE206 | 2.54 | 2.85 | 2.7 | TRUE |
| AE226-AE206 | .55 | .82 | .71 | TRUE |
| AE305 | 8.77 | 9.85 | 9.37 | TRUE |
| AE305-AE405 | 4.55 | 5.75 | 5.28 | TRUE |
| AE345-AE305 | -.15 | .79 | .33 | TRUE |
| AE345-AE445 | 4.76 | 6.01 | 5.56 | TRUE |
| AE306 | 13.65 | 15.08 | 14.47 | TRUE |
| AE306-AE406 | 5.42 | 6.86 | 6.16 | TRUE |
| AE326-AE306 | 5.68 | 7.12 | 6.56 | TRUE |
| AE326-AE426 | 11.21 | 12.65 | 12.12 | TRUE |
| AE405 | 3.9 | 4.31 | 4.09 | TRUE |
| AE445-AE405 | -.15 | .26 | .05 | TRUE |
| AE406 | 7.81 | 8.82 | 8.31 | TRUE |
| AE426-AE406 | .2 | 1.02 | .6 | TRUE |

### Cooling Coil Sensible Load (kWh/h)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| AE205 | 1.82 | 2.01 | 1.91 | TRUE |
| AE245-AE205 | .2 | .39 | .3 | TRUE |
| AE206 | 1.62 | 1.79 | 1.73 | TRUE |
| AE226-AE206 | -.23 | -.06 | -.12 | TRUE |
| AE305 | 8.77 | 9.85 | 9.37 | TRUE |
| AE305-AE405 | 4.55 | 5.75 | 5.28 | TRUE |
| AE345-AE305 | -.15 | .79 | .33 | TRUE |
| AE345-AE445 | 4.76 | 6.01 | 5.56 | TRUE |
| AE306 | 8.3 | 9.37 | 9.0 | TRUE |
| AE306-AE406 | 4.64 | 5.73 | 5.31 | TRUE |
| AE326-AE306 | -.91 | -.01 | -.39 | TRUE |
| AE326-AE426 | 4.27 | 5.31 | 4.96 | TRUE |
| AE405 | 3.9 | 4.31 | 4.09 | TRUE |
| AE445-AE405 | -.15 | .26 | .05 | TRUE |
| AE406 | 3.45 | 3.82 | 3.69 | TRUE |
| AE426-AE406 | -.22 | .14 | -.04 | TRUE |

## Zone 1 Reheat Coil Load (kWh/h)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| AE301 | 7.23 | 8.1 | 7.71 | TRUE |
| AE401 | 4.27 | 4.72 | 4.49 | TRUE |
| AE301-AE401 | 2.7 | 3.6 | 3.22 | TRUE |
| AE305 | 1.92 | 2.46 | 2.26 | TRUE |
| AE345-AE305 | -.11 | .11 | .0 | TRUE |
| AE306 | 1.92 | 2.48 | 2.26 | TRUE |
| AE326-AE306 | -.11 | .11 | .0 | TRUE |
| AE405 | .0 | .0 | .0 | TRUE |
| AE406 | .0 | .0 | .0 | TRUE |

## Zone 2 Reheat Load (kWh/h)

| test_name | Min Pass | Max Pass | TRNSYS18.05.0001 | TRNSYS18.05.0001 |
|---|---|---|---|---|
| AE301 | 7.77 | 8.81 | 8.38 | TRUE |
| AE401 | 4.63 | 5.12 | 4.87 | TRUE |
| AE301-AE401 | 2.87 | 3.93 | 3.51 | TRUE |
| AE305 | 2.02 | 2.71 | 2.46 | TRUE |
| AE345-AE305 | -.12 | .12 | .0 | TRUE |
| AE306 | 2.02 | 2.74 | 2.46 | TRUE |
| AE326-AE306 | -.12 | .12 | .01 | TRUE |
| AE405 | .0 | .0 | .0 | TRUE |
| AE406 | .0 | .0 | .0 | TRUE |