

## Functional Performance Test

**(Project)**

System: **Air Handling Unit**

Tag:

Service:

| <i>Functional Performance Test</i>        | <i>P</i> | <i>F</i> | <i>Remarks</i> |
|---|----------|----------|----------------|
| <b>Stop AHU Through Controls</b>          |          |          |                |
| Supply Fan Stop                           |          |          |                |
| Return Fan Stop                           |          |          |                |
| OA Damper Close                           |          |          |                |
| RA Damper Open                            |          |          |                |
| Relief Air Damper Close                   |          |          |                |
| DDC Alarm                                 |          |          |                |
| CW Valve Close                            |          |          |                |
| Humidifier Off                            |          |          |                |
| Heating Valve in Control (Confirm N/O)    |          |          |                |
| Drive OA Dampers Open/Closed              |          |          |                |
| Drive RA Dampers Open/Closed              |          |          |                |
| Drive Relief Air Dampers Open/Closed      |          |          |                |
| Drive Heating F/B Dampers Open/Closed     |          |          |                |
| Drive CW Valve Open/Closed                |          |          |                |
| Drive Heating Valve Open/Closed           |          |          |                |
| Freeze Protection (35°F)                  |          |          |                |
| Fire Protection (SA/RA)                   |          |          |                |
| High Static Protection (3" WG)            |          |          |                |
| High Humidity Protection (85%)            |          |          |                |
| <b>Start AHU in Occ. Mode/Min OA</b>      |          |          |                |
| Supply Fan Start                          |          |          |                |
| Return Fan Start                          |          |          |                |
| OA Damper Open to Min                     |          |          |                |
| RA Damper Open                            |          |          |                |
| Relief Damper Closed                      |          |          |                |
| Heat Valve, F/B Damper Control (50°F LAT) |          |          |                |

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|--|----------|----------|----------------|
| <b>Start AHU in Occ. Mode/Min OA (Continued)</b> |          |          |                |
| SA Flow Station Functional                       |          |          |                |
| RA Flow Station Functional                       |          |          |                |
| OA Flow Station Functional                       |          |          |                |
| SF VFD Maintains Duct SP                         |          |          |                |
| RF VFD Maintains Offset                          |          |          |                |
| OA Traq Damper Maintains Min OA                  |          |          |                |
| CW Valve Control (55°F LAT)                      |          |          |                |
| Humidifier Control (30% RH Building)             |          |          |                |
| VAV's Under Control                              |          |          |                |
| Filter Monitor Alarm                             |          |          |                |
| Building Pressure Alarm                          |          |          |                |
| <b>Override VAV's to Max (Full Cool)</b>         |          |          |                |
| SF Motor Amperage                                |          |          |                |
| RF Motor Amperage                                |          |          |                |
| <b>Run AHU in Occ. Mode/Max OA</b>               |          |          |                |
| OA Damper Open                                   |          |          |                |
| RA Damper Closed                                 |          |          |                |
| Relief Damper Open                               |          |          |                |
| SF VFD Maintains Duct SP                         |          |          |                |
| RF VFD Maintains Offset                          |          |          |                |
| CW Valve Control (55°F LAT)                      |          |          |                |
| Humidifier Control (30% RH Building)             |          |          |                |
| VAV's Under Control                              |          |          |                |
| Filter Monitor Alarm                             |          |          |                |
| Building Pressure Alarm                          |          |          |                |
| <b>Override VAV's to Max (Full Cool)</b>         |          |          |                |
| SF Motor Amperage                                |          |          |                |
| RF Motor Amperage                                |          |          |                |

| Number | Date | Remark                       |
|--------|------|------------------------------|
| 1      |      | Record participants and date |
| 2      |      |                              |
| 3      |      |                              |
| 4      |      |                              |
| 5      |      |                              |
| 6      |      |                              |

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## Functional Performance Test

**(Project)**

System: **VAV**

Tag:

Service:

| <i>Functional Performance Test</i>          | <i>P</i> | <i>F</i> | <i>Remarks</i> |
|---|----------|----------|----------------|
| <b>Confirm Occupied Mode</b>                |          |          |                |
| Design Setpoints (CFM/Temperature/Time)     | ----     | ----     |                |
| Actual Setpoints (CFM/Temperature/Time)     |          |          |                |
| <b>Drive VAV Closed</b>                     |          |          |                |
| Airflow decrease to zero                    |          |          |                |
| <b>Drive VAV Open</b>                       |          |          |                |
| Airflow increase above Max                  |          |          |                |
| <b>Drive VAV to Max (Full Cool)</b>         |          |          |                |
| Design Maximum Airflow                      | ----     | ----     |                |
| Maximum Airflow From TAB Report             | ----     | ----     |                |
| DDC Airflow Reading ( $\pm 10\%$ of Design) |          |          |                |
| Measured Airflow ( $\pm 10\%$ of Design)    |          |          |                |
| Hot water reheat closed                     |          |          |                |
| <b>Drive VAV to Min (Full Heat)</b>         |          |          |                |
| Design Minimum Airflow                      | ----     | ----     |                |
| Minimum Airflow From TAB Report             | ----     | ----     |                |
| DDC Airflow Reading ( $\pm 10\%$ of Design) |          |          |                |
| Measured Airflow ( $\pm 10\%$ of Design)    |          |          |                |
| Hot water reheat open                       |          |          |                |
| <b>Change to Unoccupied Mode</b>            |          |          |                |
| Design Setpoints (CFM/Temperature/Time)     | ----     | ----     |                |
| Actual Setpoints (CFM/Temperature/Time)     |          |          |                |
| VAV Controls to Unoccupied Setpoint         |          |          |                |

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## Functional Performance Test

(Project)

System: **Heating Water System**

| <i>Functional Performance Test</i>              | <i>P</i> | <i>F</i> | <i>Remarks</i>               |
|---|----------|----------|------------------------------|
| <b>FPT Test Prerequisites</b>                   |          |          |                              |
| Point to Point checks completed                 |          |          |                              |
| Point calibration completed                     |          |          |                              |
| <b>Record System Information Before Testing</b> |          |          |                              |
| System in Auto                                  |          |          |                              |
| Record OA-T                                     |          |          | _____ °F                     |
| Record HW System Enable Setpoint                |          |          | _____ °F                     |
| Record HWS-T                                    |          |          | _____ °F                     |
| Record HWR-T                                    |          |          | _____ °F                     |
| Record Active HWS-T Setpoint                    |          |          | _____ °F                     |
| Record Pump(s) Operation                        |          |          | HWP-1 _____ / HWP-2 _____    |
| Record Pump(s) Speed                            |          |          | HWP-1 _____ %/ HWP-2 _____ % |
| Record System Differential Pressure from BAS    |          |          | _____ PSI                    |
| Record System Differential Pressure Setpoint    |          |          | _____ PSI                    |
| Record Operation of BLR-1                       |          |          | BLR-1 _____                  |
| Record Operation of BLR-2                       |          |          | BLR-2 _____                  |
| Record Operation of BLR-3                       |          |          | BLR-3 _____                  |
| <b>Power Fail Restart</b>                       |          |          |                              |
| Disable power to the BAS panel                  |          |          |                              |
| Disable power to the BMS panel                  |          |          |                              |
| Disable power to the HW Pump VFD(s)             |          |          |                              |
| Verify pump rotation as speed decreases         |          |          |                              |
| Restore power to BMS panel                      |          |          |                              |
| Restore power to the HW Pump VFD(s)             |          |          |                              |
| Restore power to the BAS panel                  |          |          |                              |
| Record Pump(s) Operation                        |          |          | HWP-1 _____ / HWP-2 _____    |
| Record Pump(s) Speed                            |          |          | HWP-1 _____ %/ HWP-2 _____ % |
| Record Operation of BLR-1                       |          |          | BLR-1 _____                  |
| Record Operation of BLR-2                       |          |          | BLR-2 _____                  |
| Record Operation of BLR-3                       |          |          | BLR-3 _____                  |

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## Functional Performance Test

(Project)

System: **Heating Water System**

| <i>Functional Performance Test</i>            | <i>P</i> | <i>F</i> | <i>Remarks</i>          |
|---|----------|----------|-------------------------|
| <b>Pump Rotation and Alarms</b>               |          |          |                         |
| Record Pump Runtime (hours) t BAS             |          |          | HWP-1_____ / HWP-2_____ |
| Record Pump Runtime (hours) setpoint          |          |          | _____Hours              |
| Record Lead Pump                              |          |          | HWP-1_____ / HWP-2_____ |
| If Needed, Rotate Lead / Lag so HWP-1 is Lead |          |          |                         |
| HWP-1 is Enabled                              |          |          |                         |
| HWP-1 status is on at BAS                     |          |          |                         |
| Disable the VFD for HWP-1                     |          |          |                         |
| Record time delay for Alarm                   |          |          |                         |
| Verify alarm at BAS                           |          |          |                         |
| HWP-2 is Enabled                              |          |          |                         |
| HWP-2 status is on at BAS                     |          |          |                         |
| Disable the VFD for HWP-2                     |          |          |                         |
| Record time delay for Alarm                   |          |          |                         |
| Verify Alarm at BAS                           |          |          |                         |
| Restore the VFD(s) for HWP-1 & 2              |          |          |                         |
| Reset the BAS Alarm                           |          |          |                         |
| Rotate Lead / Lag so HWP-2 is Lead            |          |          |                         |
| HWP-2 is Enabled                              |          |          |                         |
| HWP-2 status is on at BAS                     |          |          |                         |
| Disable the VFD for HWP-2                     |          |          |                         |
| Record time delay for Alarm                   |          |          |                         |
| Verify Alarm at BAS                           |          |          |                         |
| HWP-1 is Enabled                              |          |          |                         |
| HWP-1 status is on at BAS                     |          |          |                         |
| Disable the VFD for HWP-1                     |          |          |                         |
| Record time delay for Alarm                   |          |          |                         |
| Verify Alarm at BAS                           |          |          |                         |
| Reset the BAS alarm                           |          |          |                         |
| Restore Lead / Lag Pump Rotation              |          |          |                         |
| <b>Boiler Staging and Alarms</b>              |          |          |                         |
| Verify Boiler Staging via BMS                 |          |          |                         |
| Disable BLR-1, 2, 3                           |          |          |                         |
| Verify BMS Alarm at BAS                       |          |          |                         |

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(Project)

System: **Heating Water System**

| <i>Functional Performance Test</i>           | <i>P</i> | <i>F</i> | <i>Remarks</i>            |
|--|----------|----------|---------------------------|
| <b>Boiler Staging and Alarms (Continued)</b> |          |          |                           |
| Restore BLR-1, 2, 3                          |          |          |                           |
| Boilers stage to maintain active setpoint    |          |          |                           |
| Record the BMS HWS-T Stpt at 60°F OA-T       |          |          | _____ °F                  |
| Record the BMS HWS-T Stpt at 0°F OA-T        |          |          | _____ °F                  |
| Release any Overrides                        |          |          |                           |
| Reset any Alarms                             |          |          |                           |
| <b>Heating Water System Enable</b>           |          |          |                           |
| Simulate an OA-T of 65°F                     |          |          |                           |
| Verify the BAS disables the BMS              |          |          |                           |
| HWP-1 is disabled                            |          |          |                           |
| HWP-1 status is off at BAS                   |          |          |                           |
| HWP-2 is disabled                            |          |          |                           |
| HWP-2 status is off at BAS                   |          |          |                           |
| Simulate an OA-T of 55°F                     |          |          |                           |
| Lead HWP is enabled                          |          |          |                           |
| HWP status at BAS                            |          |          | HWP-1 _____ / HWP-2 _____ |
| BMS is enabled                               |          |          | HWP-1 _____ / HWP-2 _____ |
| Boilers stage to maintain active setpoint    |          |          |                           |
| Release any Overrides                        |          |          |                           |
| Reset any Alarms                             |          |          |                           |

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## Functional Performance Test

(Project)

Lab Room

Room Number:

Design Offset/Pressure:

| Fume Hood Sash Position | T-Stat Mode | Supply Flow | Fume Hood Exhaust Flow | General Exhaust Flow | Table Exhaust Flow | Cabinet Exhaust Flow | Offset/Pressure |
|-------------------------|-------------|-------------|------------------------|----------------------|--------------------|----------------------|-----------------|
|                         |             |             |                        |                      |                    |                      |                 |
| Min                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Cool        |             |                        |                      |                    |                      |                 |
| Min                     | Cool        |             |                        |                      |                    |                      |                 |
|                         |             |             |                        |                      |                    |                      |                 |
| Min                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Cool        |             |                        |                      |                    |                      |                 |
| Min                     | Cool        |             |                        |                      |                    |                      |                 |
|                         |             |             |                        |                      |                    |                      |                 |
| Min                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Cool        |             |                        |                      |                    |                      |                 |
| Min                     | Cool        |             |                        |                      |                    |                      |                 |
|                         |             |             |                        |                      |                    |                      |                 |
| Min                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Heat        |             |                        |                      |                    |                      |                 |
| Max                     | Cool        |             |                        |                      |                    |                      |                 |
| Min                     | Cool        |             |                        |                      |                    |                      |                 |

Space has been provided for several tests if necessary.  
 Some categories will not apply to every room.

| Number | Date | Remark                       |
|--------|------|------------------------------|
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## Functional Performance Test

**(Project)**

System: **Lab. Exhaust Fan**

Tag:

Service:

| <i>Functional Performance Test</i> | <i>P</i> | <i>F</i> | <i>Remarks</i> |
|------------------------------------|----------|----------|----------------|
| <b>Stop EF Through Controls</b>    |          |          |                |
| Isolation damper closed            |          |          |                |
| Bypass dampers closed              |          |          |                |
| SF stop                            |          |          |                |
| RF stop                            |          |          |                |
| LEF stop                           |          |          |                |
| DDC Alarm                          |          |          |                |
| No counter-rotation freewheeling   |          |          |                |
| Drive Isolation damper open/closed |          |          |                |
| Drive Bypass damper open/closed    |          |          |                |
| <b>Start EF Through Controls</b>   |          |          |                |
| Isolation damper open              |          |          |                |
| Bypass dampers open                |          |          |                |
| LEF start                          |          |          |                |
| LEF start                          |          |          |                |
| SF start                           |          |          |                |
| RF start                           |          |          |                |
| Bypass dampers maintain duct s.p.  |          |          |                |

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## Functional Performance Test

**(Project)**

System: **Chilled Water System**

Tag:

Service:

| <i>Functional Performance Test</i>            | <i>P</i> | <i>F</i> | <i>Remarks</i> |
|---|----------|----------|----------------|
| <b>Stop Pumps through Controls</b>            |          |          |                |
| DDC Alarm                                     |          |          |                |
| Drive Emergency Valve Open/Closed             |          |          |                |
| Check De-coupler Valve                        |          |          |                |
| <b>Start Pump through Controls</b>            |          |          |                |
| VFD Maintains ΔP                              |          |          |                |
| <b>Drive CW Valves to Max</b>                 |          |          |                |
| VFD Maintains ΔP                              |          |          |                |
| Motor Amperage                                |          |          |                |
| <b>Drive CW Valves to 50%</b>                 |          |          |                |
| VFD Maintains ΔP                              |          |          |                |
| <b>Drive CW Valves to 25%</b>                 |          |          |                |
| VFD Maintains ΔP                              |          |          |                |
| <b>Release CW Valves to Automatic Control</b> |          |          |                |
| VFD Maintains ΔP                              |          |          |                |
| <b>Stop P-1</b>                               |          |          |                |
| P-2 Start                                     |          |          |                |
| VFD Maintains ΔP                              |          |          |                |

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## Functional Performance Test

**(Project)**

System: **Lighting Controls**

Serving: **Dining and Kitchen**

| <i>Functional Performance Check</i>   | <i>Pass</i> | <i>Fail</i> | <b>Remarks:</b> |
|---------------------------------------|-------------|-------------|-----------------|
| <b>Zone 1 Dining Area B 112</b>       |             |             |                 |
| Verify switch location                |             |             |                 |
| Verify switch ON/OFF function         |             |             |                 |
| Lights illuminate                     |             |             |                 |
| Lighting circuit is identified        |             |             |                 |
| Lighting panel is labeled as required |             |             |                 |
| <b>Zone 2 West Entry Alcove</b>       |             |             |                 |
| Verify photocell location             |             |             |                 |
| Verify photocell ON/OFF function      |             |             |                 |
| Lights illuminate                     |             |             |                 |
| Lighting circuit is identified        |             |             |                 |
| Lighting panel is labeled as required |             |             |                 |
| <b>Zone 3 Dish Washing 109</b>        |             |             |                 |
| Verify switch location                |             |             |                 |
| Verify switch ON/OFF function         |             |             |                 |
| Lights illuminate                     |             |             |                 |
| Lighting circuit is identified        |             |             |                 |
| Lighting panel is labeled as required |             |             |                 |
| <b>Zone 4 East Entry Alcove</b>       |             |             |                 |
| Verify photocell location             |             |             |                 |
| Verify photocell ON/OFF function      |             |             |                 |
| Lights illuminate                     |             |             |                 |
| Lighting circuit is identified        |             |             |                 |
| Lighting panel is labeled as required |             |             |                 |
| <b>Zone 5 Dining Area E 107</b>       |             |             |                 |
| Verify photocell location             |             |             |                 |
| Verify photocell ON/OFF function      |             |             |                 |
| Lights illuminate                     |             |             |                 |
| Lighting circuit is identified        |             |             |                 |
| Lighting panel is labeled as required |             |             |                 |

| <b>Number</b> | <b>Date</b> | <b>Remark</b>                |
|---------------|-------------|------------------------------|
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## Functional Performance Test

### (Project)

System: **Domestic Hot Water Heaters** Tag: **WH-1, WH-2, WH-3, WH-4, WH-5, and WH-6**

| <i>Functional Performance Check</i>  | <i>Pass</i> | <i>Fail</i> | <b>Remarks:</b> |
|--------------------------------------|-------------|-------------|-----------------|
| <b>Men Restroom 128 Sink #1</b>      |             |             |                 |
| Check for operational user valves    |             |             |                 |
| Check for operational shut-off       |             |             |                 |
| Hot water achieved when valve opened |             |             |                 |
| HW temp. does not exceed 140°F       |             |             |                 |
| <b>Men Restroom 128 Sink #2</b>      |             |             |                 |
| Check for operational user valves    |             |             |                 |
| Check for operational shut-off       |             |             |                 |
| Hot water achieved when valve opened |             |             |                 |
| HW temp. does not exceed 140°F       |             |             |                 |
| <b>Women Restroom 127 Sink #1</b>    |             |             |                 |
| Check for operational user valves    |             |             |                 |
| Check for operational shut-off       |             |             |                 |
| Hot water achieved when valve opened |             |             |                 |
| HW temp. does not exceed 140°F       |             |             |                 |
| <b>Women Restroom 127 Sink #2</b>    |             |             |                 |
| Check for operational user valves    |             |             |                 |
| Check for operational shut-off       |             |             |                 |
| Hot water achieved when valve opened |             |             |                 |
| HW temp. does not exceed 140°F       |             |             |                 |
| <b>Meal Replacement Room 121</b>     |             |             |                 |
| Check for operational user valves    |             |             |                 |
| Check for operational shut-off       |             |             |                 |
| Hot water achieved when valve opened |             |             |                 |
| HW temp. does not exceed 140°F       |             |             |                 |
| <b>Kitchen 132 Sink #1</b>           |             |             |                 |
| Check for operational user valves    |             |             |                 |
| Check for operational shut-off       |             |             |                 |
| Hot water achieved when valve opened |             |             |                 |
| HW temp. does not exceed 140°F       |             |             |                 |
| <b>Kitchen 132 Sink #1</b>           |             |             |                 |
| Check for operational user valves    |             |             |                 |
| Check for operational shut-off       |             |             |                 |
| Hot water achieved when valve opened |             |             |                 |

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## Functional Performance Test

### (Project)

System: **Domestic Hot Water Heaters** Tag: **WH-1, WH-2, WH-3, WH-4, WH-5, and WH-6**

| <i>Functional Performance Check</i>    | <i>Pass</i> | <i>Fail</i> | <b>Remarks:</b> |
|--|-------------|-------------|-----------------|
| <b>Kitchen 132 Sink #1 [continued]</b> |             |             |                 |
| HW temp. does not exceed 140°F         |             |             |                 |
| <b>Kitchen 132 Sink #2</b>             |             |             |                 |
| Check for operational user valves      |             |             |                 |
| Check for operational shut-off         |             |             |                 |
| Hot water achieved when valve opened   |             |             |                 |
| HW temp. does not exceed 140°F         |             |             |                 |
| <b>Kitchen 132 Sink #3</b>             |             |             |                 |
| Check for operational user valves      |             |             |                 |
| Check for operational shut-off         |             |             |                 |
| Hot water achieved when valve opened   |             |             |                 |
| HW temp. does not exceed 140°F         |             |             |                 |
| <b>Kitchen 132 Sink #4</b>             |             |             |                 |
| Check for operational user valves      |             |             |                 |
| Check for operational shut-off         |             |             |                 |
| Hot water achieved when valve opened   |             |             |                 |
| HW temp. does not exceed 140°F         |             |             |                 |
| <b>Kitchen 132 Sink #5</b>             |             |             |                 |
| Check for operational user valves      |             |             |                 |
| Check for operational shut-off         |             |             |                 |
| Hot water achieved when valve opened   |             |             |                 |
| HW temp. does not exceed 140°F         |             |             |                 |
| <b>Kitchen 132 Sink #6</b>             |             |             |                 |
| Check for operational user valves      |             |             |                 |
| Check for operational shut-off         |             |             |                 |
| Hot water achieved when valve opened   |             |             |                 |
| HW temp. does not exceed 140°F         |             |             |                 |
| <b>Prep Line Sink #1</b>               |             |             |                 |
| Check for operational user valves      |             |             |                 |
| Check for operational shut-off         |             |             |                 |
| Hot water achieved when valve opened   |             |             |                 |
| HW temp. does not exceed 140°F         |             |             |                 |

| <b>Number</b> | <b>Date</b> | <b>Remark</b>                |
|---------------|-------------|------------------------------|
| 1             |             | Record participants and date |
| 2             |             |                              |
| 3             |             |                              |

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## Functional Performance Test

[Project]

System: **Exterior Enclosures**    Test: **ASTM-E779-2003**    Service: **Building Envelope**

| <i>Functional Performance Test</i>                                 | <i>Pass</i> | <i>Fail</i> | <i>Remarks</i>   |
|--|-------------|-------------|--|
| <b>AMBIENT CONDITIONS</b>  |             |             |  |
| Measure interior-exterior temperature                              |             |             | Inside = _____ °F  |
|  |             |             | Outside = _____ °F   |
| Calculated temperature differential<br>(exterior °F – interior °F) |             |             | $\Delta T =$ _____ °F  |
|  |             |             |  |
| Stack pressure condition verified                                  |             |             | $(\Delta T)(\text{Bldg. Height}) < 1180 \text{ft}^{\circ}\text{F}$ |
|  |             |             |  |
| Measure approximate wind velocity < 4 MPH                          |             |             | North= _____ MPH   |
|  |             |             | West= _____ MPH  |
|  |             |             | South= _____ MPH   |
|  |             |             | East= _____ MPH  |
|  |             |             |  |
| Interior doors open; closet doors closed                           |             |             |  |
| Shut off HVAC and Supply Fans                                      |             |             |  |
| Shut off Exhaust Fans  |             |             |  |
|  |             |             |  |
| Average Bias $\Delta P$ for building baseline                      |             |             | DB <sub>1</sub> _____ Pa   |
| Average Bias $\Delta P$ for building baseline                      |             |             | DB <sub>2</sub> _____ Pa   |
|  |             |             |  |
|  |             |             |  |
| Measure Airflow <sub>1</sub>                                       |             |             | Airflow DB <sub>1</sub> = _____ CFM                                |
| Measure Airflow <sub>2</sub>                                       |             |             | Airflow DB <sub>2</sub> = _____ CFM                                |
| Total Measure Airflow  |             |             | Airflow <sub>T</sub> = _____ CFM                                   |
|  |             |             |  |
| <b>TEST SITE SEA LEVEL ELEVATION</b>                               |             |             | <b>1st Floor Elev. = _____ FEET</b>                                |
|  |             |             |  |

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## Functional Performance Test

[Project]

System: **Exterior Enclosures**    Test: **ASTM-E779-2003**    Service: **Building Envelope**

| <i>Functional Performance Test</i>         | <i>Pass</i> | <i>Fail</i> | <i>Remarks</i>                        |
|--|-------------|-------------|---------------------------------------|
| <b>DEPRESSURIZATION DOOR BLOWER TEST#1</b> |             |             |                                       |
| Tested $\Delta P$ for building             |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building             |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>            |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>            |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                     |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                            |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building            |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building   |             |             | <b>Pa</b>                             |
|  |             |             |                                       |
| <b>DEPRESSURIZATION DOOR BLOWER TEST#2</b> |             |             |                                       |
| Tested $\Delta P$ for building             |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building             |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>            |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>            |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                     |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                            |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building            |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building   |             |             | <b>Pa</b>                             |
|  |             |             |                                       |

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## Functional Performance Test

[Project]

System: **Exterior Enclosures**    Test: **ASTM-E779-2003**    Service: **Building Envelope**

| <i>Functional Performance Test</i>         | <i>Pass</i> | <i>Fail</i> | <i>Remarks</i>                        |
|--|-------------|-------------|---------------------------------------|
| <b>DEPRESSURIZATION DOOR BLOWER TEST#3</b> |             |             |                                       |
| Tested $\Delta P$ for building             |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building             |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>            |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>            |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                     |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                            |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building            |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building   |             |             | <b>Pa</b>                             |
|  |             |             |                                       |
| <b>DEPRESSURIZATION DOOR BLOWER TEST#4</b> |             |             |                                       |
| Tested $\Delta P$ for building             |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building             |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>            |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>            |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                     |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                            |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building            |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building   |             |             | <b>Pa</b>                             |
|  |             |             |                                       |

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## Functional Performance Test

[Project]

System: **Exterior Enclosures**    Test: **ASTM-E779-2003**    Service: **Building Envelope**

| <i>Functional Performance Test</i>         | <i>Pass</i> | <i>Fail</i> | <i>Remarks</i>                        |
|--|-------------|-------------|---------------------------------------|
| <b>DEPRESSURIZATION DOOR BLOWER TEST#5</b> |             |             |                                       |
| Tested $\Delta P$ for building             |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building             |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>            |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>            |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                     |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                            |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building            |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building   |             |             | <b>Pa</b>                             |
|  |             |             |                                       |
| <b>DEPRESSURIZATION DOOR BLOWER TEST#6</b> |             |             |                                       |
| Tested $\Delta P$ for building             |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building             |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>            |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>            |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                     |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                            |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building            |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building   |             |             | <b>Pa</b>                             |
|  |             |             |                                       |

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## Functional Performance Test

[Project]

System: **Exterior Enclosures**    Test: **ASTM-E779-2003**    Service: **Building Envelope**

| <i>Functional Performance Test</i>       | <i>Pass</i> | <i>Fail</i> | <i>Remarks</i>                     |
|--|-------------|-------------|------------------------------------|
| <b>PRESSURIZATION DOOR BLOWER TEST#1</b> |             |             |                                    |
| Tested $\Delta P$ for building           |             |             | DB <sub>1</sub> <b>Pa</b>          |
| Tested $\Delta P$ for building           |             |             | DB <sub>2</sub> <b>Pa</b>          |
|  |             |             |                                    |
| Measure Airflow DB <sub>1</sub>          |             |             | Airflow DB <sub>1</sub> =      CFM |
| Measure Airflow DB <sub>2</sub>          |             |             | Airflow DB <sub>2</sub> =      CFM |
|  |             |             |                                    |
| Total Measured Airflow                   |             |             | Airflow <sub>T</sub> =      CFM    |
|  |             |             |                                    |
| Turn Blower Off                          |             |             |                                    |
|  |             |             |                                    |
| Average $\Delta P$ for building          |             |             | <b>Pa</b>                          |
| Adjusted average $\Delta P$ for building |             |             | <b>Pa</b>                          |
|  |             |             |                                    |
| <b>PRESSURIZATION DOOR BLOWER TEST#2</b> |             |             |                                    |
| Tested $\Delta P$ for building           |             |             | DB <sub>1</sub> <b>Pa</b>          |
| Tested $\Delta P$ for building           |             |             | DB <sub>2</sub> <b>Pa</b>          |
|  |             |             |                                    |
| Measure Airflow DB <sub>1</sub>          |             |             | Airflow DB <sub>1</sub> =      CFM |
| Measure Airflow DB <sub>2</sub>          |             |             | Airflow DB <sub>2</sub> =      CFM |
|  |             |             |                                    |
| Total Measured Airflow                   |             |             | Airflow <sub>T</sub> =      CFM    |
|  |             |             |                                    |
| Turn Blower Off                          |             |             |                                    |
|  |             |             |                                    |
| Average $\Delta P$ for building          |             |             | <b>Pa</b>                          |
| Adjusted average $\Delta P$ for building |             |             | <b>Pa</b>                          |

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## Functional Performance Test

[Project]

System: **Exterior Enclosures**    Test: **ASTM-E779-2003**    Service: **Building Envelope**

| <i>Functional Performance Test</i>       | <i>Pass</i> | <i>Fail</i> | <i>Remarks</i>                       |
|--|-------------|-------------|--------------------------------------|
| <b>PRESSURIZATION DOOR BLOWER TEST#3</b> |             |             |                                      |
| Tested $\Delta P$ for building           |             |             | DB <sub>1</sub> <b>Pa</b>            |
| Tested $\Delta P$ for building           |             |             | DB <sub>2</sub> <b>Pa</b>            |
|  |             |             |                                      |
| Measure Airflow DB <sub>1</sub>          |             |             | Airflow DB <sub>1</sub> =        CFM |
| Measure Airflow DB <sub>2</sub>          |             |             | Airflow DB <sub>2</sub> =        CFM |
|  |             |             |                                      |
| Total Measured Airflow                   |             |             | Airflow $T$ =            CFM         |
|  |             |             |                                      |
| Turn Blower Off                          |             |             |                                      |
|  |             |             |                                      |
| Average $\Delta P$ for building          |             |             | <b>Pa</b>                            |
| Adjusted average $\Delta P$ for building |             |             | <b>Pa</b>                            |
|  |             |             |                                      |
| <b>PRESSURIZATION DOOR BLOWER TEST#4</b> |             |             |                                      |
| Tested $\Delta P$ for building           |             |             | DB <sub>1</sub> <b>Pa</b>            |
| Tested $\Delta P$ for building           |             |             | DB <sub>2</sub> <b>Pa</b>            |
|  |             |             |                                      |
| Measure Airflow DB <sub>1</sub>          |             |             | Airflow DB <sub>1</sub> =        CFM |
| Measure Airflow DB <sub>2</sub>          |             |             | Airflow DB <sub>2</sub> =        CFM |
|  |             |             |                                      |
| Total Measured Airflow                   |             |             | Airflow $T$ =            CFM         |
|  |             |             |                                      |
| Turn Blower Off                          |             |             |                                      |
|  |             |             |                                      |
| Average $\Delta P$ for building          |             |             | <b>Pa</b>                            |
| Adjusted average $\Delta P$ for building |             |             | <b>Pa</b>                            |

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## Functional Performance Test

[Project]

System: **Exterior Enclosures**    Test: **ASTM-E779-2003**    Service: **Building Envelope**

| <i>Functional Performance Test</i>       | <i>Pass</i> | <i>Fail</i> | <i>Remarks</i>                        |
|--|-------------|-------------|---------------------------------------|
| <b>PRESSURIZATION DOOR BLOWER TEST#5</b> |             |             |                                       |
| Tested $\Delta P$ for building           |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building           |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>          |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>          |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                   |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                          |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building          |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building |             |             | <b>Pa</b>                             |
|  |             |             |                                       |
| <b>PRESSURIZATION DOOR BLOWER TEST#6</b> |             |             |                                       |
| Tested $\Delta P$ for building           |             |             | DB <sub>1</sub> <b>Pa</b>             |
| Tested $\Delta P$ for building           |             |             | DB <sub>2</sub> <b>Pa</b>             |
|  |             |             |                                       |
| Measure Airflow DB <sub>1</sub>          |             |             | Airflow DB <sub>1</sub> =        CFM  |
| Measure Airflow DB <sub>2</sub>          |             |             | Airflow DB <sub>2</sub> =        CFM  |
|  |             |             |                                       |
| Total Measured Airflow                   |             |             | Airflow <sub>T</sub> =            CFM |
|  |             |             |                                       |
| Turn Blower Off                          |             |             |                                       |
|  |             |             |                                       |
| Average $\Delta P$ for building          |             |             | <b>Pa</b>                             |
| Adjusted average $\Delta P$ for building |             |             | <b>Pa</b>                             |
|  |             |             |                                       |

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