# BUBBLE Ue1

## Key Features

|  |  |  |
| --- | --- | --- |
| Albedo/Solar Absorptance | TypeWall | TypeRoof |
| Only EP | Solar Absorptance = 0.5 | Solar Absorptance = 0.5 |
| Only VCWG | Albedo = 0.15 | Albedo = 0.15 |
| Bypass | [UWG]Albedo = 0.15  [IDF]Solar Absorptance = 0.5 | [UWG]Albedo = 0.15  [IDF]Solar Absorptance = 0.5 |

## Performance

|  |  |  |  |
| --- | --- | --- | --- |
| CVRMSE (%) | OnlyEP | OnlyVCWG | Bypass |
| 2.6m Direct | 9.61 | 10.32 | 7.71 |
| 2.6m Real P0 |  | 9.71 | 9.45 |
| 2.6m Real EPW |  | 10.02 | 7.49 |
| 13.9m Direct | 9.61 | 11.43 | 7.68 |
| 13.9m Real P0 |  | 12.22 | 11.19 |
| 13.9m Real EPW |  | 11.06 | 7.56 |

Chart, histogram

Description automatically generated

# CAPITOUL

## Key Features

|  |  |  |
| --- | --- | --- |
|  | TypeWall | TypeRoof |
| OnlyVCWG | SteelFrame  Emissivity: 0.9  Albedo: 0.5 | IEAD  Emissivity: 0.94  Albedo: 0.5 |
| Bypass | Steel Frame Non-res Ext Wall  Thermal absorptance: 0.9  Solar absorptance: 0.5  Visible absorptance: 0.5 | IEAD Non-res Roof  Thermal absorptance: 0.94  Solar absorptance: 0.5  Visible absorptance: 0.5 |

## Performance

CVRMSE (%), (OnlyEP, OnlyVCWG, Bypass)

2m, direct: [ 7.32 17.44 18.24]

2m, real\_p0: [ nan 18.64 19.53]

2m, real\_epw: [ nan 15.97 16.64] [12-31 24:00] Patm

6m, direct: [ 7.32 16.51 17.04]

6m, real\_p0: [ nan 17.51 18.13]

6m, real\_epw: [ nan 15.02 15.37]

20m, direct: [ 6.29 17.59 16.91]

20m, real\_p0: [ nan 18.02 17.42]

20m, real\_epw: [ nan 16.18 15.21]

2m, direct: [ 7.32 17.44 18.24]

2m, real\_p0: [ nan 18.64 19.53]

2m, real\_epw: [ nan 20.03 21.05] [Real time Patm]

6m, direct: [ 7.32 16.51 17.04]

6m, real\_p0: [ nan 17.51 18.13]

6m, real\_epw: [ nan 18.84 19.61]

20m, direct: [ 6.29 17.59 16.91]

20m, real\_p0: [ nan 18.02 17.42]

20m, real\_epw: [ nan 19.05 18.65]

Chart, histogram

Description automatically generated

# Vancouver TopForcing

Key Features

## Performance

CVRMSE (%), (OnlyEP, OnlyVCWG, Bypass)

1.2m, direct: [12.03 8.99 9.3 ]

1.2m, real\_p0: [ nan 9.48 9.27]

1.2m, real\_epw: [ nan 9.24 9.48]

26m, direct: [12.03 6.96 6.96]

26m, real\_p0: [ nan 7.52 7.52]

26m, real\_epw: [ nan 7.38 7.38]

Chart, histogram

Description automatically generated