**HEAT LOAD CALCULATION**

**Details:**

**Location:** 13°45'21" North Latitude

121°04'419" East Longitude

**Outdoor Design:** Dry-Bulb Temperature = 34.5

Wet-Bulb Temperature = 26.1°C

**Daily Range:** 8.1 °C

# Design Month: May

**Indoor Design:** a. Dry-Bulb Temperature = 24⁰C, **50 % RH** **Indoor Design:** b. Dry-Bulb Temperature = 22.5⁰C, **50 % RH** **Indoor Design:** c. Dry-Bulb Temperature = 22⁰C, **50 % RH** **Service Schedule:** 24 hrs

**Wall Construction:** Type F Permanent Light Color

**Roof Construction:** Permanently light colored with suspended ceiling

**Temperatures:** tav = to – ½ (Daily Range) = 34.5 – ½ (8.1)

**tav = 30.45⁰**

a. ΔT = (to- ti) = (34.5 – 24) **= 9.9⁰C**

b. ΔT = (to- ti) = (34.5 – 21.5) **= 13⁰C**

c. ΔT = (to- ti) = (34.5 – 22) **= 11.9⁰C**

**A.** **EXTERNAL HEAT LOADS**

Both the walls and roof are light. Use positive ventilation for roof construction.

**1. External Wall Load**

𝐐𝐰 = 𝐔𝐀 𝐂𝐋𝐓𝐃𝐚𝐝𝐣

**For 24⁰C, Film File Storage**

* Area (m2)

**E**: 6.04 m2

# Cooling Load Temperature Difference

**CLTDADJ = (CLTDSEL + LM)k + (25 – ti) + (tAV-29)**

Where tav = 30.45⁰C

E: (25 – 0.55)(0.65) + (25-24) + (30.45-29)

E= 18.3425

# Heat transfer coefficient:

U= 2.7144 W/ m2K

* Thermal Heat Load, QW (W)

**QW= 409.8744 W**

**For 22⁰C, Minor Operating Room**

* Area (m2)

N: 13.6 m2

# Cooling Load Temperature Difference

**CLTDADJ = (CLTDSEL + LM)k + (25 – ti) + (tAV-29)**

Where tav = 30.45⁰C

N: (13 – 0.55)(0.65) + (25-22) + (30.45-29)

N= 20.3425

# Heat transfer coefficient:

U=2.7144 W/ m2K

* Thermal Heat Load, QW (W)

**QW= 479.9059 W**

**For 22.5⁰C, Pressing Area**

* Area (m2)

E:10 m2

# Cooling Load Temperature Difference

**CLTDADJ = (CLTDSEL + LM)k + (25 – ti) + (tAV-29)**

Where tav = 30.45⁰C

E: (25 – 0.55)(0.65) + (25-22.5) + (30.45-29)

E= 18.3425

# Heat transfer coefficient:

U= 2.7144 W/ m2K

* Thermal Heat Load, QW (W)

**QW= 678.6 W**

**2. Glass Load**

**QG= QSG + QTH**

**QSG= (SHGF)(SC)(A)(CLF)**

**QTH= (U)(A)( ΔT)**

**For 24⁰C, Washing Area**

* Area (m2)

E: 1.73 m2

* Solar Heat Gain, QSG (W)

E: (685)(0.8)(1.73 m2)(0.55)

**QSG= 521.422 W**

* Conduction Heat Load, QTH

E= (2.8722 W/ m2K) (1.73 m2)(34.5 – 24)⁰C

**QTH= 52.17351W**

**QG=573.5955 W**

**For 22⁰C, Minor Operating Room**

* Area (m2)

N: 1.6 m2

* Solar Heat Gain, QSG (W)

N: (120)(0.91)(1.6 m2)(0.55)

**QSG= 96.096 W**

* Conduction Heat Load, QTH

N: (2.8211 W/ m2K)(1.6 m2)( 34.5 – 22)⁰C

**QTH= 56.422 W**

**QG= 152.518 W**

**For 22.5⁰C, Emergency Room**

* Area (m2)

W: 2 m2

* Solar Heat Gain, QSG (W)

W: (685)(0.82)(2 m2)(0.55)

**QSG= 617.87 W**

* Conduction Heat Load, QTH

W: 2.8722 W/ m2K (2 m2)(34.5 – 22.5)⁰C

**QTH= 68.9328 W**

**QG= 686. 8028 W**

**3. Roof Load**

**QS= (U)(A)(CLTDADJ)**

**For 22.5⁰C, 5-Bed Ward 1**

* Area (m2)

34.2769 m2

# Cooling Load Temperature Difference

**CLTDADJ = [(CLTDMAX + LM)k + (25 – ti) + (tAV-29)]f**

Where tav = 30.45⁰C

CLTDMAX= 18

k= 0.75, medium color

f= 0.75, positive ventilation

CLTDADJ = [(18+ 0)0.75 + (25 – 22.5) + (30.45-29)]0.75

CLTDADJ= 13.0875

QS= 2.58438(34.2769 m2)(13.0875)

**QS= 1159.35 W**

**For 24⁰C, Clean Linen**

* Area (m2)

2.4581 m2

# Cooling Load Temperature Difference

**CLTDADJ = [(CLTDMAX + LM)k + (25 – ti) + (tAV-29)]f**

Where tav = 30.45⁰C

CLTDMAX= 18

k= 0.75, medium color

f= 0.75, positive ventilation

CLTDADJ = [(18+ 0)0.75 + (25 – 22.5) + (30.45-29)]0.75

CLTDADJ= 13.0875

QS= (2.58438)(2.4581 m2)(13.0875)

**QS= 75.99375 W**

**B. Infiltration Load**

**QS = 1.232 (L/s) (to- ti)**

**QL = 3000 (L/s) (ωo- ωi)**

## **For 24°C, Storage Room**

* **Infiltration Rate, L/s**

L/s = NV / 3.6

*\*wind speed from ASHRAE Meteo, v = 3 m/s*

number of air changes, N = a +bv+ c(to – ti)

N = 0.15+(0.01)(3)+0.007(34.5-24)

N = 0.2535

volume of conditioned space, V = (floor area)(building height)

V = 7.8175m2 (4m)

V = 31.27 m3

L/s = (0.2493)(31.27) / 3.6

L/s = 2.2019

**For Humidity ratio of Outside Air, wo**

**Ho= cpT + woHg**

Where:

Cp= 1.0062 kJ/kg-K

tDB = 34.5°C

hDB = h @ 34.5°C = 2564.5 kJ/kg

hWB = h @ 26.1°C = 81.2256 kJ/kg

wo =

wo= 0.018136752

**For Humidity ratio of inside air, wi**

**wi = 0.622 RhPsat – Pt (RhPsat)**

where:

Psat = P @ 24°C = 2.982 kPa

wi= 0.622(0.50) (2.982 kPa) / 101.325 kPa – (0.50) (2.982 kPa)

wi= 9.289440471x10-3 kg/kg

**Sensible Heat Load (QS)**

Qs= 1.232(2.2019) (34.5°C - 24 °C)

**Qs= 28.4841 W**

**Latent Heat Load (QL)**

QL= 3000 (2.2019) (0.018136752 - 9.289440471x10-3)

**QL= 58.4183 W**

## **For 22°C, Minor Operating Room**

* **Infiltration Rate, L/s**

L/s = NV / 3.6

*\*wind speed from ASHRAE Meteo, v = 3 m/s*

number of air changes, N = a +bv+ c(to – ti)

N = 0.15+(0.01)(3)+0.007(34.5-22)

N = 0.2675

volume of conditioned space, V = (floor area)(building height)

V = 23.389 m2(4m)

V = 93.544 m3

L/s = (0.2675) (31.27) / 3.6

L/s = 6.9516

**For Humidity ratio of Outside Air, wo**

**Ho= cpT + woHg**

Where:

Cp= 1.0062 kJ/kg-K

tDB = 34.5°C

hDB = h @ 34.5°C = 2564.5 kJ/kg

hWB = h @ 26.1°C = 81.2256 kJ/kg

wo =

wo= 0.018136752

**For Humidity ratio of inside air, wi**

**wi = 0.622 RhPsat – Pt (RhPsat)**

where:

Psat = P @ 22°C = 2.6431kPa

wi= 0.622(0.50) (2.6431 kPa) / 101.325 kPa – (0.50) (2.6431 kPa)

wi **=0.00821976** kg/kg

**Sensible Heat Load (QS)**

Qs= 1.232(2.2019) (34.5°C - 24 °C)

**Qs= 28.4841 W**

**Latent Heat Load (QL)**

QL= 3000 (2.2019) (0.018136752 - 0.00821976)

**QL= 58.4183 W**

## **For 22.5°C, Emergency Room**

* **Infiltration Rate, L/s**

L/s = NV / 3.6

*\*wind speed from ASHRAE Meteo, v = 3 m/s*

number of air changes, N = a +bv+ c(to – ti)

N=0.15+(0.01)(3)+0.007(34.5-22.5)

N = 0.264

volume of conditioned space, V = (floor area)(building height)

V = 131.4 m2(4m)

V = 525.5 m3

L/s = (0.264) (525.5) / 3.6

L/s = 38.5366

**For Humidity ratio of Outside Air, wo**

**Ho= cpT + woHg**

Where:

Cp= 1.0062 kJ/kg-K

tDB = 34.5°C

hDB = h @ 34.5°C = 2564.5 kJ/kg

hWB = h @ 26.1°C = 81.2256 kJ/kg

wo =

wo= 0.018136752

**For Humidity ratio of inside air, wi**

**wi = 0.622 RhPsat – Pt (RhPsat)**

where:

Psat = P @ 22.5°C = 2.72585 kPa

wi= 0.622(0.50) (2.72585 kPa) / 101.325 kPa – (0.50) (2.72585 kPa)

wi **=**0.00848061kg/kg

**Sensible Heat Load (QS)**

Qs= 1.232(38.5366) (34.5°C - 24 °C)

**Qs= 569.4 W**

**Latent Heat Load (QL)**

QL= 3000 (38.5366) (0.018136752 - 0.00848061)

**QL= 1115.709 W**

**C. VENTILATION LOAD**

**QS= 1.232 (L/s) (to- ti)**

**QL = 3000 (L/s) (ωo- ωi)**

## **For 24°C, Canteen**

L/s = N (L/s per person)

Where L/s per person= 8

Number of occupants= 20 persons

L/s= 8(20)= 160

QS= 1.232 (160 L/s) ( 34.5 – 24)°C

**Qs= 2069.76 W**

QL= 3000 (160 L/s) (34.5 – 24)°C

**QL= 4244.8882 W**

## **For 22°C, Minor Operating Room**

L/s = N (L/s per person)

Where L/s per person= 15

Number of occupants= 3 persons

L/s= 3(15)= 45

QS= 1.232 (45 L/s) ( 34.5 – 22)°C

**Qs= 693 W**

QL= 3000 (45 L/s) (34.5 – 22)°C

**QL= 1338.7939 W**

## **For 22.5°C, OPD clinic surgery**

L/s = N (L/s per person)

Where L/s per person= 2.5

Number of occupants= 2 persons

L/s= 2.5(2)= 5

QS= 1.232 (5 L/s) ( 34.5 – 22.5)°C

**Qs= 73.92 W**

QL= 3000 (5 L/s) (34.5 – 22.5)°C

**QL= 144.84213 W**

**D. Internal Loads**

**1. Lighting Load**

**QS =** (**lamp rating**)(**Fu**)(**Fsa**)(**CLF**)

**For 24 °C, Canteen**

Where:

Lamp rating= 2362.09 W

Fu=0.5

Fsa=1.2

CLF= 0.94

QS= (2362.09 W)( 0.5)( 1.2)( 0.94)

**QS= 1332.219 W**

**For 22.5 °C, Control Booth**

Where:

Lamp rating= 328.2994 W

Fu=0.5

Fsa=1.2

CLF= 0.94

QS= (328.2994 W)( 0.5)( 1.2)( 0.94)

**QS= 185.1609 W**

**For 22 °C, Work Area (laboratory)**

Where:

Lamp rating= 427.18 W

Fu=0.5

Fsa=1.2

CLF= 0.94

QS= (427.18 W)( 0.5)( 1.2)( 0.94)

**QS= 361.3943 W**

**2. Occupant Load**

**QS = (gain per person)(sensible heat gain)(no.of people)(CLF)**

**QL = (gain per person)(latent heat gain)(CLF)**

**For 24 °C, Canteen**

Where:

Gain per person= 100

Sensible heat gain= 0.6

Latent heat gain= 0.4

No. of people= 20

CLF= 0.92

QS= (100)(0.6)(20)(0.92)

**QS= 1104 W**

QL= (100)(0.4)(0.92)

**QL= 36.8 W**

**For 22.5 °C, Admin Office**

Where:

Gain per person= 150

Sensible heat gain= 0.55

Latent heat gain= 0.45

No. of people= 1

CLF= 0.92

QS= (150)(0.55)(1)(0.92)

**QS= 75.9**

QL= (150)(0.45)(0.92)

**QL= 62.1**

**For 22 °C, Work Area Laboratory**

Where:

Gain per person= 150

Sensible heat gain= 0.5

Latent heat gain= 0.5

No. of people= 4

CLF= 0.92

QS=(150)(0.5)(4)(0.92)

**QS= 276 W**

QL=(150)(0.4)(0.92)

**QL= 69 W**

**3. Partition Load**

**3.1 Wall Partition: QS = U A ΔT**

**For 24 °C, Canteen**

Where: Wall Partition of Canteen and Hallway

Area= 10.2 m2

ΔT= (28 - 24) °C= 4°C

QS= (2.7144)(10.2 m2) (4)

**QS= 41.53032 W**

**For 22.5 °C, Doctor’s on Duty**

Where: Wall Partition of Doctor’s on Duty and CR

Area= 10.4 m2

ΔT= (24 - 22.5) °C= 1.5°C

QS= (2.7144)(10.4 m2) (1.5)

**QS= 42.3446 W**

**For 22°C, Minor Operating Room**

Where: Wall Partition of Minor Operating Room and Hallway

Area= 31.2 m2

ΔT= (28 - 22.5) °C= 5.5°C

QS= (2.7144)(10.2 m2) (5.5)

**QS= 394.1309 W**

**3.2 Door Partition: QS = U A ΔT**

**For 24 °C, Canteen**

Where: Door Partition of Canteen and Hallway

Area= 4 m2

ΔT= (28 - 24) °C= 4 °C

QS= (2.3576)(4 m2)(4 )

**QS=37.7216**

**For 22.5 °C, X-Ray Room**

Where: Door Partition of X-Ray Room and CR

Area= 1.8 m2

ΔT= (24 – 22.5) °C= 1.5 °C

QS= (1.6048)(1.8 m2)(1.5)

**QS=4.33296 W**

**For 22 °C, Minor Operating Room**

Where: Door Partition of Minor Operating Room and Emergency Room

Area= 3.2 m2

ΔT= (22.5 - 22) °C= 0.5

QS= (2.3576)(3.2 m2)(0.5)

**QS=37.7216 W**

**4. Miscellaneous loads**

**QS= (W)(CS)(CLF)**

**QL= W(CL)**

**For 24 °C, Cooking Area**

**Where:**

W= 2580 W

Sensible Heat Gain= 0.33

CLF= 0.96

Latent Heat Gain= 0.16

QS=(2580 W)(0.33)(0.96)

**QS= 817.344 W**

QL=(2580 W)(0.16)(1)

**QL= 412.8 W**

**For 22.5 °C, Emergency Room**

**Where:**

W= 300.8 W

Sensible Heat Gain= 0.33

CLF= 0.96

Latent Heat Gain= 0.16

QS=(300.8 W)(0.33)(0.96)

**QS= 95.29344 W**

QL=(300.8 W)(0.16)(1)

**QL= 48.128 W**

**For 22 °C, Minor Operating Room**

**Where:**

W= 2284.4 W

Sensible Heat Gain= 0.33

CLF= 0.96

Latent Heat Gain= 0.16

QS=(2284.4 W)(0.33)(0.96)

**QS= 723.6979 W**

QL=(2284.4 W)(0.16)(1)

**QL= 365.504 W**

**A COMPLETE SUMMARY OF HEAT LOAD CALCULATION IN TABULAR FORM**

**FOR GROUND FLOOR:**

1. **EXTERNAL LOADS**
2. **External Wall Load**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| **Space** | **Orientation** | **U** | **A(m^2)** | **CLTDsel** | **LM** | **k** | **Ti** | **Tave** | **CLTD adj** | **Q(W)** |
| Power House | E | 2.7144 | 22 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 1492.92 |
| Power House | N | 2.7144 | 16 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 564.5952 |
| Maintenance Office | N | 2.7144 | 5.8 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 204.6657 |
| Maintenance Office CR | N | 2.7144 | 5.04 | 13 | 2.22 | 0.65 | 24 | 30.45 | 12.343 | 177.8474 |
| Female Toilet | N | 2.7144 | 11.28 | 13 | 2.22 | 0.65 | 24 | 30.45 | 12.343 | 398.0396 |
| Male Toilet | N | 2.7144 | 11.28 | 13 | 2.22 | 0.65 | 24 | 30.45 | 12.343 | 398.0396 |
| MINOR OPERATING ROOM | N | 2.7144 | 13.6 | 13 | 2.22 | 0.65 | 22 | 30.45 | 14.343 | 479.9059 |
| Examination/Treatment AREA | N | 2.7144 | 19.6 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 691.6291 |
| Examination/Treatment AREA | W | 2.7144 | 29.6 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 2651.4259 |
| CR | N | 2.7144 | 8.08 | 13 | 2.22 | 0.65 | 24 | 30.45 | 12.343 | 285.12057 |
| Cadaver Holding Room | E | 2.7144 | 22.4 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 1520.064 |
| EMERGENCY ROOM | W | 2.7144 | 23.6 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 2113.9747 |
| HALLWAY | W | 2.7144 | 49.85 | 33 | -0.55 | 0.65 | 28 | 30.45 | 19.5425 | 4465.3237 |
| Work Area (laboratory) | E | 2.7144 | 21.6 | 25 | -0.55 | 0.65 | 22 | 30.45 | 20.3425 | 1465.776 |
| WAITING AREA (CR) | E | 2.7144 | 6.12 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 415.3032 |
| Film File Storage | E | 2.7144 | 6.04 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 409.8744 |
| Pressing Area | E | 2.7144 | 10 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 678.6 |
| Ultrasound | N | 2.7144 | 5.24 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 184.9049 |
| Ultrasound | W | 2.7144 | 19.2 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 1719.8438 |
| Ultrasound CR | N | 2.7144 | 6.4 | 13 | 2.22 | 0.65 | 24 | 30.45 | 12.343 | 225.8380 |
| Ultrasound CR | W | 2.7144 | 7.04 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 630.6094 |
| Cooking Area | S | 2.7144 | 12.52 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 747.6543 |
| Cooking Area | E | 2.7144 | 19.8 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 1343.628 |
| Dietician's Office | S | 2.7144 | 11.6 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 692.7148 |
| Dietician's Office CR | S | 2.7144 | 5.6 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 334.4140 |
| Staff Dining | S | 2.7144 | 26.12 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 1559.8028 |
| OPD clinic Ob-gyne | W | 2.7144 | 10.64 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 953.0801 |
| OPD clinic Ob-gyne | S | 2.7144 | 19.4 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 1158.5059 |
| CR | W | 2.7144 | 6.4 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 573.2812 |
| CR | S | 2.7144 | 6.84 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 408.4629 |
| Canteen | W | 2.7144 | 39.2 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 3511.3478 |
| Canteen | E | 2.7144 | 44.8 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 3040.128 |
| Canteen | S | 2.7144 | 50.8 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 3033.6134 |
| Washing Area | E | 2.7144 | 10.27 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 696.9222 |
|  |  |  |  |  |  |  |  |  | **Total Load:** | **39227.8573** |
| **Table 8.0** Ground Floor External Wall Load  **FOR SECOND FLOOR:** | | | | | | | | | | |
| **Space** | **Orientation** | **U** | **A(m^2)** | **CLTDsel** | **LM** | **k** | **Ti** | **Tave** | **CLTD adj** | **Q(W)** |
| 5 Bed Ward E | E | 2.7144 | 26 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 1400.3725 |
| 5 Bed Ward N | N | 2.7144 | 19.38 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 728.2120 |
| 5 Bed Ward | N | 2.7144 | 19.38 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 728.2120 |
| Stairs N | N | 2.7144 | 43.2 | 13 | 2.22 | 0.65 | 28 | 30.45 | 8.343 | 978.3175 |
| Stairs W | W | 2.7144 | 41.2 | 33 | -0.55 | 0.65 | 28 | 30.45 | 19.5425 | 2185.5018 |
| 5-Bed Ward | N | 2.7144 | 19.38 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 728.2120 |
| 5-Bed Ward N | N | 2.7144 | 19.38 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 728.2120 |
| 5-Bed Ward W | W | 2.7144 | 26 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 1767.3594 |
| Hallway (W) | W | 2.7144 | 9.7 | 33 | -0.55 | 0.65 | 28 | 30.45 | 19.5425 | 514.5477 |
| Isolation room W | W | 2.7144 | 12.28 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 834.73744 |
| Isolation room S | S | 2.7144 | 10.48 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 447.4130 |
| Isolation room CR | W | 2.7144 | 7.48 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 478.0001 |
| Private Room | W | 2.7144 | 9 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 611.7782 |
| Private Room | W | 2.7144 | 9 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 611.7782 |
| Private Room | W | 2.7144 | 9 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 611.7782 |
| Private Room | W | 2.7144 | 9 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 611.7782 |
| CSSR | W | 2.7144 | 13.05 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 833.9440 |
| Sterile Supply Room N | N | 2.7144 | 12 | 13 | 2.22 | 0.65 | 24 | 30.45 | 12.343 | 402.0460 |
| Sterile Supply Room W | W | 2.7144 | 10.58 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 676.1018 |
| Recovery Room W | W | 2.7144 | 30.4 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 2066.4510 |
| Recovery Room S | S | 2.7144 | 21.6 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 922.1489 |
| Recovery Room CR | S | 2.7144 | 4.44 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 171.4749 |
| Hallway (S) | S | 2.7144 | 19.2 | 22 | -3.88 | 0.65 | 28 | 30.45 | 10.228 | 533.04735 |
| Lounge Area | S | 2.7144 | 21.2 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 905.0721 |
| DR-1 | S | 2.7144 | 5.04 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 215.1680 |
| DR-2 | S | 2.7144 | 5.04 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 215.1680 |
| DR-3 | S | 2.7144 | 5.04 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 215.1680 |
| Anesthesia Off. And Storage | S | 2.7144 | 9.8 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 378.4807 |
| Sterile Storage | S | 2.7144 | 8.8 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 339.8602 |
| Clean-up Room | S | 2.7144 | 10.4 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 401.6530 |
| Sub-Ster Room | S | 2.7144 | 10.4 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 443.9976 |
| Major Operating Room S | S | 2.7144 | 24 | 22 | -3.88 | 0.65 | 22 | 30.45 | 16.228 | 1057.1827 |
| Major Operating Room E | E | 2.7144 | 24 | 25 | -0.55 | 0.65 | 22 | 30.45 | 20.3425 | 1325.2243 |
| Fire Exit | E | 2.7144 | 7.4 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 398.5675 |
| Delivery Room E | E | 2.7144 | 24 | 25 | -0.55 | 0.65 | 22 | 30.45 | 20.3425 | 1325.2243 |
| Delivery Room N | N | 2.7144 | 9.4 | 13 | 2.22 | 0.65 | 22 | 30.45 | 14.343 | 365.9668 |
| Chief of Clinics | E | 2.7144 | 12.9 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 694.8002 |
| Conference Room | E | 2.7144 | 20.4 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 1098.7538 |
| Chief of Hospital | E | 2.7144 | 8.16 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 439.5015 |
| Reception (CR) | E | 2.7144 | 10.2 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 507.8465 |
| Isolation Room S | S | 2.7144 | 12.28 | 22 | -0.55 | 0.65 | 22.5 | 30.45 | 17.8925 | 596.4076 |
| Isolation Room E | E | 2.7144 | 8.88 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 478.2810 |
| Isolation Room CR | E | 2.7144 | 7.84 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 390.3448 |
|  |  |  |  |  |  |  |  |  | **Total Load:** | **31364.09493** |
| **Table 9.0** Second Floor External Wall Load  **FOR THIRD FLOOR** | | | | | | | | | | |
| **Space** | **Orientation** | **U** | **A(m^2)** | **CLTDsel** | **LM** | **k** | **Ti** | **Tave** | **CLTD adj** | **Q(W)** |
| 5 Bed Ward E | E | 2.7144 | 26 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 1764.36 |
| 5 Bed Ward N | N | 2.7144 | 19.4 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 684.57168 |
| 5 Bed Ward | N | 2.7144 | 19.4 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 684.57168 |
| Stairs E | E | 2.7144 | 40.92 | 25 | -0.55 | 0.65 | 28 | 30.45 | 14.3425 | 2776.8312 |
| Stairs N | N | 2.7144 | 68 | 13 | 2.22 | 0.65 | 28 | 30.45 | 8.343 | 2399.5296 |
| Stairs W | W | 2.7144 | 40.92 | 33 | -0.55 | 0.65 | 28 | 30.45 | 19.5425 | 3665.417184 |
| 5 Bed Ward | N | 2.7144 | 19.4 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 684.57168 |
| 5 Bed Ward N | N | 2.7144 | 19.4 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 684.57168 |
| 5 Bed Ward W | W | 2.7144 | 26 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 2328.9552 |
| Hallway | W | 2.7144 | 9.7 | 33 | -0.55 | 0.65 | 28 | 30.45 | 19.5425 | 868.87944 |
| Isolation Room W | W | 2.7144 | 13.4 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 1200.30768 |
| Isolation Room CR | W | 2.7144 | 8.56 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 766.763712 |
| Isolation Room S | S | 2.7144 | 12 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 716.6016 |
| Private Room | W | 2.7144 | 10.6 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 949.49712 |
| Private Room | W | 2.7144 | 10.6 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 949.49712 |
| Private Room | W | 2.7144 | 10.6 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 949.49712 |
| Private Room | W | 2.7144 | 10.6 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 949.49712 |
| Solarium | W | 2.7144 | 11.65 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 1043.55108 |
| Admitting N | N | 2.7144 | 12 | 13 | 2.22 | 0.65 | 22.5 | 30.45 | 13.843 | 423.4464 |
| Admitting W | W | 2.7144 | 13.2 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 1182.39264 |
| Billing | W | 2.7144 | 13.2 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 1182.39264 |
| Cashier | W | 2.7144 | 10.4 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 931.58208 |
| Personel's Dining W | W | 2.7144 | 7.69 | 33 | -0.55 | 0.65 | 22.5 | 30.45 | 25.0425 | 688.833288 |
| Personel's Dining CR W | W | 2.7144 | 7.16 | 33 | -0.55 | 0.65 | 24 | 30.45 | 23.5425 | 641.358432 |
| Personel's Dining CR S | S | 2.7144 | 6 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 358.3008 |
| Personel's Dining S | S | 2.7144 | 20.4 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 1218.22272 |
| Stairs S | S | 2.7144 | 19.2 | 22 | -3.88 | 0.65 | 28 | 30.45 | 10.228 | 1146.56256 |
| Female Toilet | S | 2.7144 | 11.28 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 673.605504 |
| Male Toilet | S | 2.7144 | 11.28 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 673.605504 |
| Hallway S | S | 2.7144 | 24 | 22 | -3.88 | 0.65 | 28 | 30.45 | 10.228 | 1433.2032 |
| Water Tank S | S | 2.7144 | 48 | 22 | -3.88 | 0.65 | 24 | 30.45 | 14.228 | 2866.4064 |
| Water Tank E | E | 2.7144 | 61.6 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 4180.176 |
| Water Tank N | N | 2.7144 | 8.88 | 13 | 2.22 | 0.65 | 24 | 30.45 | 12.343 | 313.350336 |
| Solarium | E | 2.7144 | 11.67 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 791.9262 |
| Private Room | E | 2.7144 | 10.6 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 719.316 |
| Private Room | E | 2.7144 | 10.6 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 719.316 |
| Private Room | E | 2.7144 | 10.6 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 719.316 |
| Private Room | E | 2.7144 | 10.6 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 719.316 |
| Isolation Room S | S | 2.7144 | 8.88 | 22 | -3.88 | 0.65 | 22.5 | 30.45 | 15.728 | 530.285184 |
| Isolation Room E | E | 2.7144 | 13.4 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 909.324 |
| Isolation Room CR | E | 2.7144 | 9.04 | 25 | -0.55 | 0.65 | 24 | 30.45 | 18.3425 | 613.4544 |
| Fire Exit | E | 2.7144 | 7.4 | 25 | -0.55 | 0.65 | 22.5 | 30.45 | 19.8425 | 502.164 |
|  |  |  |  |  |  |  |  |  | **Total Load** | **48205.32818** |

**Table 10.0** Third Floor External Wall Load

|  |  |
| --- | --- |
| **Summary of Data** | |
|  | **Q** |
| FIRST FLOOR | 39227.85734 |
| SECOND FLOOR | 31364.09493 |
| THIRD FLOOR | 48205.32818 |
| TOTAL | **118797.2805 W** |
|

**Table 11.0** Summary of Data for External Wall Load

1. **Roof Load**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **THIRD FLOOR** | | | | | | | |
| TYPE 6, roof without suspended ceiling | | | | | | | |
| **SPACE** | **U** | **Area (m2)** | **CLTDmax** | **Ti** | **Tave** | **CLTDadj** | **Q(W)** |
| 5-Bed Ward 1 | 2.58438 | 34.2769 | 18 | 22.5 | 30.45 | 13.0875 | 1159.35 |
| 5-Bed Ward 2 | 2.58438 | 34.26 | 18 | 22.5 | 30.45 | 13.0875 | 1158.778 |
| Waiting Area 1 | 2.58438 | 37.4087 | 18 | 22.5 | 30.45 | 13.0875 | 1265.277 |
| Waiting Area 2 | 2.58438 | 37.4087 | 18 | 22.5 | 30.45 | 13.0875 | 1265.277 |
| 5-Bed Ward 3 | 2.58438 | 34.26 | 18 | 22.5 | 30.45 | 13.0875 | 1158.778 |
| 5-Bed Ward 4 | 2.58438 | 34.26 | 18 | 22.5 | 30.45 | 13.0875 | 1158.778 |
| Isolation Room 1 | 2.58438 | 10.1393 | 18 | 22.5 | 30.45 | 13.0875 | 342.9423 |
| Private Room 1 | 2.58438 | 13.9222 | 18 | 22.5 | 30.45 | 13.0875 | 470.8916 |
| Private Room 2 | 2.58438 | 13.8738 | 18 | 22.5 | 30.45 | 13.0875 | 469.2546 |
| Chief Nurse | 2.58438 | 30.712 | 18 | 22.5 | 30.45 | 13.0875 | 1038.774 |
| Treatment Room | 2.58438 | 17.9413 | 18 | 22.5 | 30.45 | 13.0875 | 606.8299 |
| Nurse Station | 2.58438 | 22.829 | 18 | 22.5 | 30.45 | 13.0875 | 772.1469 |
| Dirty Utility | 2.58438 | 4.7869 | 18 | 24 | 30.45 | 11.9625 | 147.9901 |
| Clean Linen | 2.58438 | 2.4581 | 18 | 24 | 30.45 | 11.9625 | 75.99375 |
| Private Room 3 | 2.58438 | 13.8735 | 18 | 22.5 | 30.45 | 13.0875 | 469.2444 |
| Private Room 4 | 2.58438 | 13.8928 | 18 | 22.5 | 30.45 | 13.0875 | 469.8972 |
| Isolation Room 2 | 2.58438 | 10.1716 | 18 | 22.5 | 30.45 | 13.0875 | 344.0348 |
| Private Room 5 | 2.58438 | 15.8619 | 18 | 22.5 | 30.45 | 13.0875 | 536.4982 |
| Private Room 6 | 2.58438 | 15.8619 | 18 | 22.5 | 30.45 | 13.0875 | 536.4982 |
| 3-Bed Ward 1 | 2.58438 | 24.783 | 18 | 22.5 | 30.45 | 13.0875 | 838.2372 |
| 3-Bed Ward 2 | 2.58438 | 24.8909 | 18 | 22.5 | 30.45 | 13.0875 | 841.8867 |
| Private Room 7 | 2.58438 | 13.6813 | 18 | 22.5 | 30.45 | 13.0875 | 462.7436 |
| Private Room 8 | 2.58438 | 13.7512 | 18 | 22.5 | 30.45 | 13.0875 | 465.1078 |
| Private Room 9 | 2.58438 | 16.0112 | 18 | 22.5 | 30.45 | 13.0875 | 541.548 |
| Private Room 10 | 2.58438 | 16.0112 | 18 | 22.5 | 30.45 | 13.0875 | 541.548 |
| Elevator | 2.58438 | 8.9651 | 18 | 22.5 | 30.45 | 13.0875 | 303.2272 |
| Private Room 11 | 2.58438 | 13.7512 | 18 | 22.5 | 30.45 | 13.0875 | 465.1078 |
| Private Room 12 | 2.58438 | 13.7512 | 18 | 22.5 | 30.45 | 13.0875 | 465.1078 |
| Waiting Area | 2.58438 | 23.4829 | 18 | 22.5 | 30.45 | 13.0875 | 794.2638 |
| Private Room 13 | 2.58438 | 10.7572 | 18 | 22.5 | 30.45 | 13.0875 | 363.8416 |
| Private Room 14 | 2.58438 | 11.315 | 18 | 22.5 | 30.45 | 13.0875 | 382.7081 |
| Solarium 1 | 2.58438 | 13.3083 | 18 | 22.5 | 30.45 | 13.0875 | 450.1276 |
| Stretcher's Wheelchair Nook 1 | 2.58438 | 11.0872 | 18 | 22.5 | 30.45 | 13.0875 | 375.0032 |
| Stretcher's Wheelchair Nook 2 | 2.58438 | 8.275 | 18 | 22.5 | 30.45 | 13.0875 | 279.8859 |
| Solarium 2 | 2.58438 | 13.4675 | 18 | 22.5 | 30.45 | 13.0875 | 455.5122 |
| Water Tank 1 and 2 | 2.58438 | 183.9438 | 18 | 24 | 30.45 | 11.9625 | 5686.741 |
| Chapel | 2.58438 | 58.8601 | 18 | 22.5 | 30.45 | 13.0875 | 1990.829 |
| Waiting Area | 2.58438 | 43.5914 | 18 | 22.5 | 30.45 | 13.0875 | 1474.395 |
| Admitting | 2.58438 | 10.9006 | 18 | 22.5 | 30.45 | 13.0875 | 368.6918 |
| Billing | 2.58438 | 10.7831 | 18 | 22.5 | 30.45 | 13.0875 | 364.7176 |
| Cashier | 2.58438 | 9.4163 | 18 | 22.5 | 30.45 | 13.0875 | 318.4882 |
| Personel's dining | 2.58438 | 26.9958 | 18 | 22.5 | 30.45 | 13.0875 | 913.0809 |
| Private Room 15 | 2.58438 | 11.2 | 18 | 22.5 | 30.45 | 13.0875 | 378.8184 |
| Private Room 16 | 2.58438 | 10.7 | 18 | 22.5 | 30.45 | 13.0875 | 361.9069 |
|  |  |  |  |  |  | **Total Load** | **33330.76** |

**Table 12.0** Roof Load

|  |  |
| --- | --- |
| **Summary of Data** | |
|  | **Q** |
| FIRST FLOOR | 0 |
| SECOND FLOOR | 0 |
| THIRD FLOOR | 33330.7627 |
| TOTAL | **33330.7627** |
|

**Table 13.0** Summary of Data for Roof Load

1. **Glass Load**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FIRST FLOOR** | | | | | | | | | | |
| **Space** | **Orientation** | **U** | **To** | **Ti** | **A(m^2)** | **SHGF** | **SCL** | **SC** | **Qsg (W)** | **Qth (W)** |
| Power House | E | 2.8722 | 34.5 | 22.5 | 4 | 685 | 0.8 | 0.55 | 1205.6 | 137.8656 |
| Maintenance Office | N | 2.8722 | 34.5 | 22.5 | 1.2 | 120 | 0.91 | 0.55 | 72.072 | 41.35968 |
| Maintenance Office CR | N | 2.8722 | 34.5 | 24 | 0.36 | 120 | 0.91 | 0.55 | 21.6216 | 10.85692 |
| Famale Toilet | N | 2.8722 | 34.5 | 24 | 0.72 | 120 | 0.91 | 0.55 | 43.2432 | 21.71383 |
| Male Toilet | N | 2.8722 | 34.5 | 24 | 0.72 | 120 | 0.91 | 0.55 | 43.2432 | 21.71383 |
| Minor Operating Room | N | 2.8211 | 34.5 | 22 | 1.6 | 120 | 0.91 | 0.55 | 96.096 | 56.422 |
| Exaination/Treatment and Obs Area | N | 2.8722 | 34.5 | 22.5 | 4.4 | 120 | 0.91 | 0.55 | 264.264 | 151.6522 |
| Exaination/Treatment and Obs Area CR | N | 2.8722 | 34.5 | 22.5 | 0.72 | 120 | 0.91 | 0.55 | 43.2432 | 24.81581 |
| Emergency Room | W | 2.8722 | 34.5 | 22.5 | 2 | 685 | 0.82 | 0.55 | 617.87 | 68.9328 |
| Hallway | W | 2.8722 | 34.5 | 28 | 2.75 | 685 | 0.82 | 0.55 | 849.5713 | 51.34058 |
| Hallway | W | 2.8211 | 34.5 | 28 | 9 | 685 | 0.82 | 0.55 | 2780.415 | 165.0344 |
| Ultrasound N | N | 2.8722 | 34.5 | 22.5 | 0.6 | 120 | 0.91 | 0.55 | 36.036 | 20.67984 |
| Ultrasound W | W | 2.8722 | 34.5 | 22.5 | 4.2 | 685 | 0.82 | 0.55 | 1297.527 | 144.7589 |
| Ultrasound CR | W | 2.8722 | 34.5 | 24 | 0.36 | 685 | 0.82 | 0.55 | 111.2166 | 10.85692 |
| OPB Clinic OB-Gyne W | W | 2.8722 | 34.5 | 22.5 | 0.6 | 685 | 0.82 | 0.55 | 185.361 | 20.67984 |
| OPB Clinic OB-Gyne S | S | 2.8722 | 34.5 | 22.5 | 1.6 | 230 | 0.83 | 0.55 | 167.992 | 55.14624 |
| OPB Clinic OB-Gyne CR | S | 2.8722 | 34.5 | 24 | 0.36 | 230 | 0.83 | 0.55 | 37.7982 | 10.85692 |
| Canteen W | W | 2.8722 | 34.5 | 24 | 4.2 | 685 | 0.82 | 0.55 | 1297.527 | 126.664 |
| Canteen S | S | 2.8722 | 34.5 | 24 | 8.4 | 230 | 0.83 | 0.55 | 881.958 | 253.328 |
| Canteen E | E | 2.8722 | 34.5 | 24 | 1.4 | 685 | 0.8 | 0.55 | 421.96 | 42.22134 |
| Dietary | S | 2.8722 | 34.5 | 22.5 | 2.4 | 230 | 0.83 | 0.55 | 251.988 | 82.71936 |
| Dietitian Office | S | 2.8722 | 34.5 | 22.5 | 2.8 | 230 | 0.83 | 0.55 | 293.986 | 96.50592 |
| Cooking Area S | S | 2.8722 | 34.5 | 24 | 1.8 | 230 | 0.83 | 0.55 | 188.991 | 54.28458 |
| Cooking Area E | E | 2.8722 | 34.5 | 24 | 2.4 | 685 | 80% | 0.55 | 723.36 | 72.37944 |
| Washing Area | E | 2.8722 | 34.5 | 24 | 1.73 | 685 | 0.8 | 0.55 | 521.422 | 52.17351 |
| Pressing Area | E | 2.8722 | 34.5 | 22.5 | 2 | 685 | 0.8 | 0.55 | 602.8 | 68.9328 |
| Film File Storage | E | 2.8722 | 34.5 | 24 | 0.36 | 685 | 0.8 | 0.55 | 108.504 | 10.85692 |
| Waiting Area CR | E | 2.8722 | 34.5 | 24 | 0.36 | 685 | 0.8 | 0.55 | 108.504 | 10.85692 |
| Work Area Laboratory | E | 2.8722 | 34.5 | 22 | 2.4 | 685 | 0.8 | 0.55 | 723.36 | 86.166 |
| Cadaver Holding Room | E | 2.8722 | 34.5 | 22.5 | 1.6 | 685 | 0.8 | 0.55 | 482.24 | 55.14624 |
|  |  |  |  |  |  |  | **Total:** | | **14479.77** | **2026.921** |
|  |  |  |  |  |  |  | **Overall Total Load:** | | **16506.69152** | |
| **Table 14.0 Ground Floor Glass Load**  **SECOND FLOOR** | | | | | | | | | | |
| **Space** | **Orientation** | **U** | **To** | **Ti** | **A(m^2)** | **SHGF** | **SCL** | **SC** | **Qsg (W)** | **Qth (W)** |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 4.62 | 120 | 0.91 | 0.55 | 277.4772 | 159.2348 |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 4.62 | 120 | 0.91 | 0.55 | 277.4772 | 159.2348 |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 4.62 | 120 | 0.91 | 0.55 | 277.4772 | 159.2348 |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 4.62 | 120 | 0.91 | 0.55 | 277.4772 | 159.2348 |
| Hallway | W | 2.8211 | 34.5 | 28 | 2.7 | 685 | 0.82 | 0.55 | 834.1245 | 49.51031 |
| Isolation Room | W | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.82 | 0.55 | 432.509 | 48.25296 |
| Isolation Room CR | W | 2.8722 | 34.5 | 24 | 0.36 | 685 | 0.82 | 0.55 | 111.2166 | 10.85692 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 3 | 685 | 0.82 | 0.55 | 926.805 | 103.3992 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 3 | 685 | 0.82 | 0.55 | 926.805 | 103.3992 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 3 | 685 | 0.82 | 0.55 | 926.805 | 103.3992 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 3 | 685 | 0.82 | 0.55 | 926.805 | 103.3992 |
| CSSR | W | 2.8722 | 34.5 | 22.5 | 1.95 | 685 | 0.82 | 0.55 | 602.4233 | 67.20948 |
| Sterile Supply Room | W | 2.8722 | 34.5 | 24 | 5.02 | 685 | 0.82 | 0.55 | 1550.854 | 151.3937 |
| Recovery Room | S | 2.8722 | 34.5 | 22.5 | 2.4 | 230 | 0.83 | 0.55 | 251.988 | 82.71936 |
| Recovery Room CR | S | 2.8722 | 34.5 | 24 | 0.36 | 230 | 0.83 | 0.55 | 37.7982 | 10.85692 |
| Lounge Area | S | 2.8722 | 34.5 | 22.5 | 2.8 | 230 | 0.83 | 0.55 | 293.986 | 96.50592 |
| DR 1 | S | 2.8722 | 34.5 | 24 | 0.36 | 230 | 0.83 | 0.55 | 37.7982 | 10.85692 |
| DR 2 | S | 2.8722 | 34.5 | 24 | 0.36 | 230 | 0.83 | 0.55 | 37.7982 | 10.85692 |
| DR 3 | S | 2.8722 | 34.5 | 24 | 0.36 | 230 | 0.83 | 0.55 | 37.7982 | 10.85692 |
| Anesthesia Off. and Storage | S | 2.8722 | 34.5 | 24 | 1.6 | 230 | 0.83 | 0.55 | 167.992 | 48.25296 |
| Sterile Storage | S | 2.8722 | 34.5 | 24 | 1.6 | 230 | 0.83 | 0.55 | 167.992 | 48.25296 |
| Clean-up Room | S | 2.8722 | 34.5 | 24 | 1.6 | 230 | 0.83 | 0.55 | 167.992 | 48.25296 |
| Sub-Ster Room | S | 2.8722 | 34.5 | 22.5 | 1.6 | 230 | 0.83 | 0.55 | 167.992 | 55.14624 |
| Chief of Clinics | E | 2.8722 | 34.5 | 22.5 | 2.1 | 685 | 0.8 | 0.55 | 632.94 | 72.37944 |
| Conference Room | E | 2.8722 | 34.5 | 22.5 | 3.6 | 685 | 0.8 | 0.55 | 1085.04 | 124.079 |
| Chief of Hospital | E | 2.8722 | 34.5 | 22.5 | 2.72 | 685 | 0.8 | 0.55 | 819.808 | 93.74861 |
| Reception (CR) | S | 2.8722 | 34.5 | 24 | 1.2 | 230 | 0.83 | 0.55 | 125.994 | 36.18972 |
| Isolation Room | E | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.8 | 0.55 | 421.96 | 48.25296 |
| Isolation Room CR | E | 2.8722 | 34.5 | 24 | 0.36 | 685 | 0.8 | 0.55 | 108.504 | 10.85692 |
|  |  |  |  |  |  |  | **Total:** | | **12911.64** | **2185.824** |
| **Table 15.0 Second Floor Glass Load**  **THIRD FLOOR** | | | | | | | | | | |
| **Space** | **Orientation** | **U** | **To** | **Ti** | **A(m^2)** | **SHGF** | **SCL** | **SC** | **Qsg (W)** | **Qth (W)** |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 2.31 | 120 | 0.91 | 0.55 | 138.7386 | 79.61738 |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 2.31 | 120 | 0.91 | 0.55 | 138.7386 | 79.61738 |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 2.31 | 120 | 0.91 | 0.55 | 138.7386 | 79.61738 |
| 5 Bed Ward | N | 2.8722 | 34.5 | 22.5 | 2.31 | 120 | 0.91 | 0.55 | 138.7386 | 79.61738 |
| Hallway | W | 2.8722 | 34.5 | 28 | 2.7 | 685 | 0.82 | 0.55 | 834.1245 | 50.40711 |
| Isolation Room | W | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.82 | 0.55 | 432.509 | 48.25296 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.82 | 0.55 | 432.509 | 48.25296 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.82 | 0.55 | 432.509 | 48.25296 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.82 | 0.55 | 432.509 | 48.25296 |
| Private Room | W | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.82 | 0.55 | 432.509 | 48.25296 |
| Solarium | W | 2.8211 | 34.5 | 22.5 | 3.35 | 685 | 0.82 | 0.55 | 1034.932 | 113.4082 |
| Admitting | W | 2.8722 | 34.5 | 22.5 | 2.4 | 685 | 0.82 | 0.55 | 741.444 | 82.71936 |
| Billing | W | 2.8722 | 34.5 | 22.5 | 2.4 | 685 | 0.82 | 0.55 | 741.444 | 82.71936 |
| Cashier | W | 2.8722 | 34.5 | 22.5 | 2.4 | 685 | 0.82 | 0.55 | 741.444 | 82.71936 |
| Personel's Dining W | W | 2.8722 | 34.5 | 22.5 | 2.23 | 685 | 0.82 | 0.55 | 688.9251 | 76.86007 |
| Personel's Dining CR | W | 2.8722 | 34.5 | 24 | 0.36 | 685 | 0.82 | 0.55 | 111.2166 | 10.85692 |
| Personel's Dining S | S | 2.8722 | 34.5 | 22.5 | 2.4 | 230 | 0.83 | 0.55 | 251.988 | 82.71936 |
| Female Toilet | S | 2.8722 | 34.5 | 24 | 0.72 | 230 | 0.83 | 0.55 | 75.5964 | 21.71383 |
| Male Toilet | S | 2.8722 | 34.5 | 24 | 0.72 | 230 | 0.83 | 0.55 | 75.5964 | 21.71383 |
| Solarium | E | 2.8211 | 34.5 | 22.5 | 3.35 | 685 | 0.8 | 0.55 | 1009.69 | 113.4082 |
| Private Room | E | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.8 | 0.55 | 421.96 | 48.25296 |
| Private Room | E | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.8 | 0.55 | 421.96 | 48.25296 |
| Private Room | E | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.8 | 0.55 | 421.96 | 48.25296 |
| Private Room | E | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.8 | 0.55 | 421.96 | 48.25296 |
| Isolation Room | E | 2.8722 | 34.5 | 22.5 | 1.4 | 685 | 0.8 | 0.55 | 421.96 | 48.25296 |
| Isolation Room CR | E | 2.8722 | 34.5 | 24 | 0.36 | 685 | 0.8 | 0.55 | 108.504 | 10.85692 |
|  |  |  |  |  |  |  | **Total:** | | **11242.2** | **1551.102** |
|  |  |  |  |  |  |  | **Overall Total Load** | | **12793.30629** | |

**Table 16.0 Third Floor Glass Load**

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary of Data** | | | |
|  | **QS** | **QL** | **Q** |
| FIRST FLOOR | 14479.77 | 2026.921 | 16506.69 |
| SECOND FLOOR | 12911.64 | 2185.824 | 15097.46 |
| THIRD FLOOR | 11242.2 | 1551.102 | 12793.31 |
| TOTAL | **38633.61** | **5763.847** | **44397.46** |
|

**Table 17.0 Summary of Data for Glass Load**

1. **INFILTRATION LOAD**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **GROUND FLOOR** | | | | | | | | |
| **SPACE** | **Volume** | **L/s** | **To** | **Ti** | **Wo** | **Wi** | **Qs (W)** | **Ql (W)** |
| 1.1 Power House | 149.7544 | 10.9819893 | 34.5 | 22.5 | 0.0181368 | 0.009293 | 162.3577303 | 291.3582281 |
| 1.2 Work Area | 38.6048 | 2.83101867 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 41.85377997 | 82.01015475 |
| 1.3 Storage Room | 31.27 | 2.20192917 | 34.5 | 24 | 0.0181368 | 0.009293 | 28.4841557 | 58.41839405 |
| 1.4 Maintenance Office | 65.238 | 4.78412 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 70.72843008 | 138.5884262 |
| 1.4 Maintenance Office CR | 11.35 | 0.79922917 | 34.5 | 24 | 0.0181368 | 0.009293 | 10.3388285 | 21.20399017 |
| 1.5 Female toilet | 73.1964 | 5.1542465 | 34.5 | 24 | 0.0181368 | 0.009293 | 66.67533272 | 136.7449996 |
| 1.6 Male Toilet | 73.3856 | 5.16756933 | 34.5 | 24 | 0.0181368 | 0.009293 | 66.8476769 | 137.0984617 |
| 1.7 Minor Operating Room | 93.5544 | 6.95161167 | 34.5 | 22 | 0.0181368 | 0.00822 | 107.0548197 | 206.8172319 |
| 1.8 Equipment and supply storage area | 22.44 | 1.58015 | 34.5 | 24 | 0.0181368 | 0.009293 | 20.4408204 | 41.92225016 |
| 1.9 Emergency Room | 525.2 | 38.5146667 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 569.400832 | 1115.709271 |
| 1.9 Examination/Treatment Area CR | 14.8348 | 1.04461717 | 34.5 | 24 | 0.0181368 | 0.009293 | 13.51316767 | 27.71426902 |
| 1.10 Cadaver Holding Room | 78.5512 | 5.76042133 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 85.16206899 | 166.8703391 |
| 1.11 Supply Room | 125.1572 | 9.17819467 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 135.69043 | 265.877853 |
| 1.12 Bulk Storage | 15.9088 | 1.12024467 | 34.5 | 24 | 0.0181368 | 0.009293 | 14.49148501 | 29.72070826 |
| 1.13 Pharmacy | 82.9948 | 6.08628533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 89.97964237 | 176.3101063 |
| 1.14 Medical Records Office | 71.8048 | 5.26568533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 77.84789197 | 152.5386159 |
| 1.15 Medical Records | 74.5232 | 5.46503467 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 80.79507251 | 158.3134523 |
| 1.16 PHILHEALTH | 68.5512 | 5.027088 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 74.32046899 | 145.6268267 |
| 1.17 Doctor's Duty | 46.4248 | 3.40448533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 50.33191117 | 98.62258145 |
| 1.18 Nurse Station (ER) CR | 11.9092 | 0.83860617 | 34.5 | 24 | 0.0181368 | 0.009293 | 10.84820937 | 22.24868367 |
| HALLWAY | 2624.716 | 164.409294 | 34.5 | 28 | 0.0181368 | 0.011816 | 1316.589625 | 3117.460883 |
| 1.21 Work Area (laboratory) | 131.44 | 9.76672222 | 34.5 | 22 | 0.0181368 | 0.00822 | 150.4075222 | 290.5695184 |
| 1.23 Waiting area | 50.71 | 3.71873333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 54.9777536 | 107.7258514 |
| 1.23 Waiting area CR | 12.9452 | 0.91155783 | 34.5 | 24 | 0.0181368 | 0.009293 | 11.79191213 | 24.18413159 |
| 1.24 OPD clinic dental 1 | 57.5244 | 4.218456 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.3656535 | 122.2020305 |
| 1.25 OPD clinic dental 2 | 57.5244 | 4.218456 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.3656535 | 122.2020305 |
| 1.26 Elevator | 35.8604 | 2.62976267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 38.87841126 | 76.18008521 |
| 1.27 OPD clinic surgery 1 | 57.7424 | 4.23444267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.60200038 | 122.665139 |
| 1.28 OPD clinic surgery 2 | 57.7424 | 4.23444267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.60200038 | 122.665139 |
| 1.29 Cashier | 21.95 | 1.60966667 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 23.797312 | 46.62950972 |
| 1.30 Billing | 22.04 | 1.61626667 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 23.8948864 | 46.82070133 |
| 1.31 Admitting | 22.5452 | 1.65331467 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 24.44260403 | 47.89392358 |
| 1.32 Film File Storage | 22.0812 | 1.5548845 | 34.5 | 24 | 0.0181368 | 0.009293 | 20.11398589 | 41.25194253 |
| 1.33 Radiologist Office | 36.5968 | 2.68376533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 39.67678669 | 77.74445746 |
| 1.34 Dark Room | 19.8088 | 1.45264533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 21.47590861 | 42.08084884 |
| 1.35 Control Booth | 101.0152 | 7.40778133 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 109.5166392 | 214.5917654 |
| 1.37 OPD Clinic Pedia 1 | 57.5244 | 4.218456 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.3656535 | 122.2020305 |
| 1.38 OPD Clinic Pedia 2 | 57.5244 | 4.218456 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.3656535 | 122.2020305 |
| 1.39 OPD Records | 41.672 | 3.05594667 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 45.17911552 | 88.52596487 |
| 1.40 OPD info. And admitting | 39.922 | 2.92761333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 43.28183552 | 84.8083502 |
| 1.41 OPD Clinic Medical 1 | 57.7424 | 4.23444267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.60200038 | 122.665139 |
| 1.42 OPD Clinic Medical 2 | 57.7424 | 4.23444267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 62.60200038 | 122.665139 |
| 1.46 Pressing Area | 33.724 | 2.47309333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 36.56221184 | 71.64162122 |
| 1.47 Linen Storage | 33.2548 | 2.34169217 | 34.5 | 24 | 0.0181368 | 0.009293 | 30.29212987 | 62.12638345 |
| 1.49 Linen Office | 33.75 | 2.3765625 | 34.5 | 24 | 0.0181368 | 0.008481 | 30.7432125 | 68.84527492 |
| 1.50 Admin Office | 54.428 | 3.99138667 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 59.00866048 | 115.6241893 |
| 1.51 Male Toilet | 69.0396 | 4.8615385 | 34.5 | 24 | 0.0181368 | 0.009293 | 62.88886204 | 128.9792951 |
| 1.53 Washing Area | 68.5068 | 5.023832 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 74.27233229 | 145.5325055 |
| 1.54 Receiving Sorting Area | 34.2844 | 2.51418933 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 37.1697751 | 72.83210765 |
| 1.55 Administrative office | 141.2708 | 10.3598587 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 153.1601505 | 300.1087992 |
| 1.56 Social Welfare | 54.3936 | 3.988864 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 58.97136538 | 115.5511116 |
| 1.57 Female Toilet | 68.1712 | 4.80038867 | 34.5 | 24 | 0.0181368 | 0.009293 | 62.09782779 | 127.3569563 |
| 1.58 OPD Info. And admitting | 41.7668 | 3.06289867 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 45.28189389 | 88.72735337 |
| 1.59 OPD records | 46.3676 | 3.40029067 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 50.26989722 | 98.50106856 |
| 1.60 Ultrasound | 76.3076 | 5.59589067 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 82.72964762 | 162.1041447 |
| 1.60 Ultrasound CR | 10.1376 | 0.713856 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.234441216 | 18.93899301 |
| 1.61 Cooking Area | 136.8608 | 9.63728133 | 34.5 | 24 | 0.0181368 | 0.009293 | 124.6678713 | 255.6823839 |
| 1.62 Dry storage | 10.3764 | 0.7306715 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.451966524 | 19.38511749 |
| 1.63 Cold Storage | 7.85 | 0.55277083 | 34.5 | 24 | 0.0181368 | 0.009293 | 7.1506435 | 14.66531479 |
| 1.64 Supply Receiving Area | 22.8736 | 1.67739733 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 24.79864218 | 48.59156052 |
| 1.65 Dietician's Office | 36.9 | 2.706 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 40.005504 | 78.38856076 |
| 1.65 Dietician's Office CR | 7.78 | 0.54784167 | 34.5 | 24 | 0.0181368 | 0.009293 | 7.0868798 | 14.53454128 |
| 1.66 Dietary | 152.13 | 10.7124875 | 34.5 | 24 | 0.0181368 | 0.008481 | 138.5767383 | 310.3239014 |
| 1.67 Staff Dining | 203.5524 | 14.3334815 | 34.5 | 24 | 0.0181368 | 0.008481 | 185.4179167 | 415.2183982 |
| 1.68 OPD clinic Ob-gyne | 108.0224 | 7.92164267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 117.1135652 | 229.4775194 |
| 1.68 OPD clinic Ob-gyne CR | 10.1376 | 0.713856 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.234441216 | 18.93899301 |
| 1.70 Canteen | 726.7968 | 51.178608 | 34.5 | 24 | 0.0181368 | 0.009293 | 662.0464731 | 1357.79667 |
| X Ray CR | 7.8824 | 0.55505233 | 34.5 | 24 | 0.0181368 | 0.009293 | 7.180156984 | 14.72584424 |
| Washing Area CR | 9.6 | 0.676 | 34.5 | 24 | 0.18137 | 0.009293 | 8.744736 | 348.9716794 |
|  |  |  |  |  | **Total** | | **6335.215611** | 13463.22174 |
|  |  |  |  |  | **Total Load** | | **19798.43735** | |
| **Table 18.0 Ground Floor for Infiltration Load**  **SECOND FLOOR** | | | | | | | | |
| **SPACE** | **Volume** | **L/s** | **To** | **Ti** | **Wo** | **Wi** | **Qs (W)** | **Ql (W)** |
| 5-Bed Ward 1 | 137.1076 | 10.0545573 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 148.4052662 | 291.2646397 |
| 5-Bed Ward 1 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.521745188 | 19.55998699 |
| 5-Bed Ward 2 | 137.04 | 10.0496 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 148.332096 | 291.1210336 |
| 5-Bed Ward 2 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.521745188 | 19.55998699 |
| Hallway 1 | 881.3296 | 55.2055069 | 34.5 | 28 | 0.0181368 | 0.011816 | 441.3680276 | 1046.783608 |
| Hallway 2 | 573.16452 | 35.9023887 | 34.5 | 28 | 0.0181368 | 0.011816 | 287.0395975 | 680.7659973 |
| Hallway 3 | 315.0296 | 19.7331041 | 34.5 | 28 | 0.0181368 | 0.011816 | 157.7661674 | 374.1708224 |
| Hallway 4 | 398.6188 | 24.9690387 | 34.5 | 28 | 0.0181368 | 0.011816 | 199.6274646 | 473.4524128 |
| Hallway 5 | 571.5204 | 35.7994028 | 34.5 | 28 | 0.0181368 | 0.011816 | 286.2162257 | 678.8132229 |
| 5-Bed Ward 3 | 137.16 | 10.0584 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 148.461984 | 291.3759557 |
| 5-Bed Ward 3 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.521745188 | 19.55998699 |
| 5-Bed Ward 4 | 136.47 | 10.0078 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 147.715128 | 289.9101537 |
| 5-Bed Ward 4 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.521745188 | 19.55998699 |
| Isolation Room 1 | 54.6952 | 4.01098133 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 59.20208448 | 116.1917919 |
| Isolation Room 1 CR | 10.4924 | 0.73883983 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.542116448 | 19.60183453 |
| Private Room 1 | 55.6824 | 4.083376 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 60.27062976 | 118.288951 |
| Private Room 1 CR | 10.462 | 0.73669917 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.514469738 | 19.54504144 |
| Private Room 2 | 55.5016 | 4.07011733 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 60.07493184 | 117.9048684 |
| Private Room 2 CR | 10.4788 | 0.73788217 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.529748183 | 19.5764271 |
| Chief Nurse | 122.848 | 9.00885333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 132.9706752 | 260.9722471 |
| Chief Nurse CR | 10.5496 | 0.74286767 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.594135915 | 19.7086952 |
| Treatment Room | 71.7652 | 5.26278133 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 77.67865248 | 152.45446 |
| Hallway | 91.316 | 5.71993278 | 34.5 | 28 | 0.0181368 | 0.011816 | 45.73086256 | 108.4589601 |
| Nurse Station CR | 9.6484 | 0.67940817 | 34.5 | 24 | 0.0181368 | 0.009293 | 8.774556473 | 18.02507913 |
| Dirty Utility | 19.1476 | 1.34831017 | 34.5 | 24 | 0.0181368 | 0.009293 | 17.4134258 | 35.77142378 |
| Clean Linen | 9.8324 | 0.69236483 | 34.5 | 24 | 0.0181368 | 0.009293 | 8.941891823 | 18.36882675 |
| Private Room 3 | 55.494 | 4.06956 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 60.0667056 | 117.8887233 |
| Private Room 3 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.521745188 | 19.55998699 |
| Private Room 4 | 55.5712 | 4.07522133 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 60.15026688 | 118.0527232 |
| Private Room 4 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.521745188 | 19.55998699 |
| Isolation Room 2 | 54.8264 | 4.02060267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 59.34409536 | 116.4705067 |
| Isolation Room 2 CR | 10.4852 | 0.73833283 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.535568543 | 19.58838353 |
| Reception | 44.2088 | 3.24197867 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 47.85160512 | 93.91499965 |
| Private Room 5 | 54.7252 | 4.01318133 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 59.23455648 | 116.2555224 |
| Private Room 5 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.603594 | 19.72812442 |
| Chief of Hospital | 74.9276 | 5.49469067 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 81.10163424 | 159.172507 |
| Chief of Hospital CR | 27.7184 | 1.95183733 | 34.5 | 24 | 0.0181368 | 0.009293 | 25.20797916 | 51.78333748 |
| 3-Bed Ward 1 | 101.488 | 7.44245333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 109.8506112 | 215.596114 |
| 3-Bed Ward 1 CR | 10.4348 | 0.73478383 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.489733208 | 19.49422658 |
| Elevator | 26.4604 | 1.94042933 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 28.64073696 | 56.21117191 |
| 3-Bed Ward 2 | 101.92 | 7.47413333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 110.318208 | 216.5138335 |
| 3-Bed Ward 2 CR | 10.4348 | 0.73478383 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.489733208 | 19.49422658 |
| Private Room 6 | 55.0048 | 4.03368533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 59.53719552 | 116.8494909 |
| Private Room 6 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.603594 | 19.72812442 |
| Conference Room | 153.8148 | 11.279752 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 166.4891395 | 326.7565934 |
| 3-Bed Ward 3 | 101.488 | 7.44245333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 109.8506112 | 215.596114 |
| 3-Bed Ward 3 CR | 10.4348 | 0.73478383 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.489733208 | 19.49422658 |
| 3-Bed Ward 4 | 101.92 | 7.47413333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 110.318208 | 216.5138335 |
| 3-Bed Ward 4 CR | 10.4348 | 0.73478383 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.489733208 | 19.49422658 |
| Private Room 7 | 55.0048 | 4.03368533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 59.53719552 | 116.8494909 |
| Private Room 7 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.603594 | 19.72812442 |
| Private Room 8 | 55.0048 | 4.03368533 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 59.53719552 | 116.8494909 |
| Private Room 8 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.603594 | 19.72812442 |
| Chief of Clinics | 85.4464 | 6.26606933 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 92.48718336 | 181.5181282 |
| Chief of Clinics CR | 6.6584 | 0.46886233 | 34.5 | 24 | 0.0181368 | 0.009293 | 6.055357035 | 12.43918027 |
| CSSR | 125.7552 | 9.222048 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 136.1174285 | 267.1481597 |
| Delivery Room | 139.9448 | 10.3986761 | 34.5 | 22 | 0.0181368 | 0.00822 | 159.8796452 | 309.370701 |
| Sub-Ster Room 1 | 21.6444 | 1.5241265 | 34.5 | 24 | 0.0181368 | 0.009293 | 19.68409375 | 40.43592956 |
| Labor Room | 102.9944 | 7.55292267 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 111.4811386 | 218.796236 |
| Labor Room CR | 15.452 | 1.08807833 | 34.5 | 24 | 0.0181368 | 0.009293 | 14.05253168 | 28.86732751 |
| Pathologic Nursery | 67.1976 | 4.927824 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 72.73468224 | 142.7512753 |
| Pre-mature nursery | 67.1996 | 4.92797067 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 72.73684704 | 142.755524 |
| Breastfeeding room | 40.9032 | 2.999568 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 44.27362368 | 86.89274564 |
| Pre-operation area | 76.0028 | 5.64743028 | 34.5 | 22 | 0.0181368 | 0.00822 | 86.82924052 | 168.0165288 |
| Autoclave area | 59.95 | 4.39633333 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 64.88988 | 127.3548305 |
| Autoclave area CR | 6.72 | 0.4732 | 34.5 | 24 | 0.0181368 | 0.009293 | 6.111378 | 12.55426099 |
| Sterile supply room | 86.4024 | 6.084169 | 34.5 | 24 | 0.0181368 | 0.009293 | 78.57704264 | 161.4164107 |
| Work Area 1 | 94.4012 | 6.92275467 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 102.1798589 | 200.5412647 |
| Major Operating Room | 140.17 | 10.4154097 | 34.5 | 22 | 0.0181368 | 0.00822 | 160.1369245 | 309.8685422 |
| Sub-Ster Room 2 | 22.7648 | 1.60302133 | 34.5 | 24 | 0.0181368 | 0.009293 | 20.70302052 | 42.52905367 |
| Jan.Clo. | 16.5352 | 1.16435367 | 34.5 | 24 | 0.0181368 | 0.009293 | 15.03762761 | 30.89095481 |
| Clean up room | 51.64 | 3.63631667 | 34.5 | 24 | 0.0181368 | 0.009293 | 46.96302975 | 96.4735175 |
| Sterile Instrument Supply Storage Area | 29.9136 | 2.106416 | 34.5 | 24 | 0.0181368 | 0.009293 | 27.20436264 | 55.88439607 |
| Anesthesia Office & Storage | 70.0828 | 4.93499717 | 34.5 | 24 | 0.0181368 | 0.009293 | 63.73548841 | 130.9282384 |
| DR-1 | 11.2 | 0.78866667 | 34.5 | 24 | 0.0181368 | 0.009293 | 10.18563 | 20.92376832 |
| DR-2 | 11.2 | 0.78866667 | 34.5 | 24 | 0.0181368 | 0.009293 | 10.18563 | 20.92376832 |
| DR-3 | 11.2 | 0.78866667 | 34.5 | 24 | 0.0181368 | 0.009293 | 10.18563 | 20.92376832 |
| Lounge Area | 165.2084 | 12.1152827 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 178.8215722 | 350.9605967 |
| Recovery Room | 187.8968 | 13.7790987 | 34.5 | 22.5 | 0.0181368 | 0.008481 | 203.3794963 | 399.1587174 |
| Recovery Room CR | 8.3604 | 0.5887115 | 34.5 | 24 | 0.0181368 | 0.009293 | 7.603209023 | 15.61884577 |
|  |  |  |  |  | **Total:** | | **5646.476982** | **11703.58128** |
|  |  |  |  |  | **Overall Total Load** | | **17350.05827** | |
|  |  |  |  |  |  | |  | |
| **Space** | **Volume** | **L/s** | **To** | **Ti** | **Wo** | **Wi** | **Qs** | **Ql** |
| 5-Bed Ward 1 | 137.1076 | 10.0545573 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 148.6465756 | 291.2737492 |
| 5-Bed Ward 1 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.5372277 | 19.55998036 |
| 5-Bed Ward 2 | 137.04 | 10.0496 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 148.5732864 | 291.1301386 |
| 5-Bed Ward 2 CR | 10.47 | 0.7678 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 11.3511552 | 22.2426485 |
| Waiting Area 1 | 149.6348 | 9.37295761 | 34.5 | 28 | 0.0181368 | 0.011816 | 75.05864455 | 177.7261371 |
| Waiting Area 2 | 149.6348 | 9.37295761 | 34.5 | 28 | 0.0181368 | 0.011816 | 75.05864455 | 177.7261371 |
| 5-Bed Ward 3 | 137.04 | 10.0496 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 148.5732864 | 291.1301386 |
| 5-Bed Ward 3 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.5372277 | 19.55998036 |
| 5-Bed Ward 4 | 137.04 | 10.0496 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 148.5732864 | 291.1301386 |
| 5-Bed Ward 4 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.5372277 | 19.55998036 |
| Isolation Room 1 | 40.5572 | 2.97419467 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 43.97049395 | 86.16041489 |
| Isolation Room 1 CR | 10.4888 | 0.73858633 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.554352808 | 19.59510238 |
| Private Room 1 | 55.6888 | 4.08384533 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 60.37556941 | 118.3062468 |
| Private Room 1 CR | 10.462 | 0.73669917 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.52994042 | 19.54503481 |
| Private Room 2 | 55.4952 | 4.069648 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 60.16567603 | 117.8949596 |
| Private Room 2 CR | 10.4744 | 0.73757233 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.541235704 | 19.56820041 |
| Chief Nurse | 122.848 | 9.00885333 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 133.1868877 | 260.9804091 |
| Chief Nurse CR | 10.5496 | 0.74286767 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.609736136 | 19.70868852 |
| Treatment Room | 71.7652 | 5.26278133 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 77.80495923 | 152.4592281 |
| Hallway | 91.316 | 5.71993278 | 34.5 | 28 | 0.0181368 | 0.011816 | 45.80522168 | 108.4589944 |
| Nurse Station CR | 9.66 | 0.680225 | 34.5 | 24 | 0.0181368 | 0.009293 | 8.7993906 | 18.04674405 |
| Dirty Utility | 19.1476 | 1.34831017 | 34.5 | 24 | 0.0181368 | 0.009293 | 17.44174032 | 35.77141164 |
| Clean Linen | 9.8324 | 0.69236483 | 34.5 | 24 | 0.0181368 | 0.009293 | 8.956431484 | 18.36882052 |
| Private Room 3 | 55.494 | 4.06956 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 60.16437504 | 117.8924103 |
| Private Room 3 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.5372277 | 19.55998036 |
| Private Room 4 | 55.5712 | 4.07522133 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 60.24807219 | 118.0564153 |
| Private Room 4 CR | 10.47 | 0.7372625 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.5372277 | 19.55998036 |
| Isolation Room 2 | 40.6864 | 2.98366933 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 44.11056742 | 86.43488959 |
| Isolation Room 2 CR | 10.4852 | 0.73833283 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.551073532 | 19.58837689 |
| Private Room 5 | 63.4476 | 4.652824 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 68.78735002 | 134.7891753 |
| Private Room 5 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Private Room 6 | 63.4476 | 4.652824 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 68.78735002 | 134.7891753 |
| Private Room 6 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| 3-Bed Ward 1 | 99.132 | 7.26968 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 107.4749491 | 210.5977298 |
| 3-Bed Ward 1 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| 3-Bed Ward 2 | 99.5636 | 7.30133067 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 107.9428726 | 211.5146283 |
| 3-Bed Ward 2 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Private Room 7 | 54.7252 | 4.01318133 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 59.33087283 | 116.2591583 |
| Private Room 7 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Private Room 8 | 55.0048 | 4.03368533 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 59.63400397 | 116.8531454 |
| Private Room 8 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Private Room 9 | 64.0448 | 4.69661867 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 69.43481037 | 136.0578773 |
| Private Room 9 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Private Room 10 | 64.0448 | 4.69661867 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 69.43481037 | 136.0578773 |
| Private Room 10 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Elevator | 35.8604 | 2.62976267 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 38.87841126 | 76.18245199 |
| Private Room 11 | 55.0048 | 4.03368533 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 59.63400397 | 116.8531454 |
| Private Room 11 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Private Room 12 | 55.0048 | 4.03368533 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 59.63400397 | 116.8531454 |
| Private Room 12 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Waiting Area | 93.9316 | 5.88377106 | 34.5 | 28 | 0.0181368 | 0.011816 | 47.11723861 | 111.5656279 |
| Private Room 13 | 43.0288 | 3.15544533 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 46.65010381 | 91.41112454 |
| Private Room 13 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Private Room 14 | 45.26 | 3.31906667 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 49.0690816 | 96.15112428 |
| Private Room 14 CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| Solarium 1 | 53.2332 | 3.903768 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 57.71330611 | 113.0895278 |
| Stretcher's Wheelchair Nook 1 | 44.3488 | 2.77795956 | 34.5 | 28 | 0.0181368 | 0.011816 | 22.24590012 | 52.67451763 |
| Stretcher's Wheelchair Nook 2 | 33.1 | 2.07334722 | 34.5 | 28 | 0.0181368 | 0.011816 | 16.60336456 | 39.31395063 |
| Solarium 2 | 53.87 | 3.95046667 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 58.4036992 | 114.4423567 |
| Water Tank 1 and 2 | 735.7752 | 51.810837 | 34.5 | 24 | 0.0181368 | 0.009293 | 670.2249874 | 1374.570053 |
| Chapel | 235.4404 | 14.7477251 | 34.5 | 28 | 0.0181368 | 0.011816 | 118.0997822 | 279.6402496 |
| Male Toilet | 69.7808 | 4.91373133 | 34.5 | 24 | 0.0181368 | 0.009293 | 63.56402853 | 130.3639997 |
| Female Toilet | 69.9224 | 4.92370233 | 34.5 | 24 | 0.0181368 | 0.009293 | 63.69301338 | 130.6285359 |
| Waiting Area | 174.3656 | 12.7868107 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 189.0402089 | 370.4252867 |
| Admitting | 43.6024 | 3.19750933 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 47.27197798 | 92.62969027 |
| Billing | 43.1324 | 3.16304267 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 46.76242278 | 91.63121416 |
| Cashier | 37.6652 | 2.76211467 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 40.83510323 | 80.01660023 |
| Personel's dining | 107.9832 | 7.603817 | 34.5 | 24 | 0.0181368 | 0.009293 | 98.36297671 | 201.7334547 |
| Personel's dining CR | 10.56 | 0.7436 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.6192096 | 19.72811772 |
| HALLWAY | 2512.0732 | 157.353474 | 34.5 | 28 | 0.0181368 | 0.011816 | 1260.08662 | 2983.671352 |
| Private Room 16 | 42.8 | 3.13866667 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 46.402048 | 90.92505787 |
| Private Room 16 CR | 10.4 | 0.73233333 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.473464 | 19.42920685 |
| Private Room 15 | 44.8 | 3.28533333 | 34.5 | 22.5 | 0.0181368 | 0.00848 | 48.570368 | 95.17389235 |
| Private Room 15 CR | 10.8 | 0.7605 | 34.5 | 24 | 0.0181368 | 0.009293 | 9.837828 | 20.17648404 |
|  |  |  |  |  | **Total** | | **5262.10372** | 11319.93168 |
|  |  |  |  |  | **Total Load** | | **16582.0354** | |

**Table 20.0 Third Floor for Infiltration Load**

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary of Data** | | | |
|  | **QS** | **QL** | **Q** |
| FIRST FLOOR | 6335.215611 | 13463.22174 | 19798.4374 |
| SECOND FLOOR | 5646.476982 | 11703.58128 | 17350.0583 |
| THIRD FLOOR | 5262.10372 | 11319.93168 | 16582.0354 |
| TOTAL | **17243.79631** | **36486.73471** | **53730.531** |
|

**Table 21.0 Summary of Data for Infiltration Load**

1. **VENTILATION LOAD**

**GROUND FLOOR**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SPACE** | **Occ** | **L/s** | **To** | **Ti** | **Wo** | **Wi** | **Qs (W)** | **Qw (W)** |
| Maintenance Office | 2 | 16 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 236.544 | 463.49482 |
| Minor Operating Room | 3 | 45 | 34.5 | 22 | 0.0181368 | 0.00821976 | 693 | 1338.7939 |
| Examination/Treatment Area | 5 | 40 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 591.36 | 1158.737 |
| Supply Room | 3 | 7.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 110.88 | 217.2632 |
| Pharmacy | 2 | 16 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 236.544 | 463.49482 |
| Medical Records Office | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| PHILHEALTH | 2 | 16 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 236.544 | 463.49482 |
| Doctor's Duty | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Nurse Station | 14 | 112 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 1655.808 | 3244.4637 |
| Work Area Laboratory | 4 | 40 | 34.5 | 22 | 0.0181368 | 0.00821976 | 616 | 1190.039 |
| OPD Clinic Dental | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| OPD Clinic Dental | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| OPD Clinic Surgery | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| OPD Clinic Surgery | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| Cashier | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Billing | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Admitting | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Radiologist Office | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Dark Room | 1 | 8 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 118.272 | 231.74741 |
| Control Booth | 3 | 24 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 354.816 | 695.24222 |
| OPD Clinic Pedia | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| OPD Clinic Pedia | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| OPD info. And Admitting | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| OPD Clinic Medical | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| OPD Clinic Medical | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.84213 |
| Admin Office | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Administrative Office | 4 | 10 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 147.84 | 289.68426 |
| Social Welfare | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| OPD Info. And Admitting | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| OPD Records | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Ultrasound | 2 | 16 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 236.544 | 463.49482 |
| Supply Receiving Area | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Dietician's Office | 1 | 2.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 36.96 | 72.421065 |
| Dietary | 4 | 10 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 147.84 | 289.68426 |
| Staff Dining | 5 | 40 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 591.36 | 1158.737 |
| OPD clinic Ob-gyne | 3 | 7.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 110.88 | 217.2632 |
| Canteen | 20 | 160 | 34.5 | 24 | 0.0181368 | 0.009293235 | 2069.76 | 4244.8882 |
| Storage Area | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.009293235 | 32.34 | 66.326378 |
| Equipment and Supply Storage Area | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.009293235 | 32.34 | 66.326378 |
| Bulk Storage | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.009293235 | 32.34 | 66.326378 |
| Film File Storage | 2 | 5 | 34.5 | 24 | 0.0181368 | 0.009293235 | 64.68 | 132.65276 |
| Cooking Area | 4 | 32 | 34.5 | 24 | 0.0181368 | 0.009293235 | 413.952 | 848.97763 |
| Linen Storage | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.009293235 | 32.34 | 66.326378 |
|  |  |  |  |  |  | **Total:** | **9870.784** | **19550.091** |
|  |  |  |  |  |  | **Total Load** | | **29420.875** |

**Table 22.0 Ground Floor for Ventilation Load**

**SECOND FLOOR**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SPACE** | **Occ.** | **L/s** | **To** | **Ti** | **Wo** | **Wi** | **Qs(W)** | **Ql(W)** |
| 5-Bed Ward 1 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 960.96 | 1882.9473 |
| 5-Bed Ward 2 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 960.96 | 1882.9473 |
| 5-Bed Ward 3 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 960.96 | 1882.9473 |
| 5-Bed Ward 4 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 960.96 | 1882.9473 |
| Isolation Room 1 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Private Room 1 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Private Room 2 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Chief Nurse | 7 | 17.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 258.72 | 506.94735 |
| Treatment Room | 2 | 16 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 236.544 | 463.49472 |
| Nurse Station | 5 | 40 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 591.36 | 1158.7368 |
| Dirty Utility | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 32.34 | 66.3264 |
| Clean Linen | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 32.34 | 66.3264 |
| Private Room 3 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Private Room 4 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Isolation Room 2 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Reception | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Private Room 5 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Chief of Hospital | 3 | 7.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 110.88 | 217.26315 |
| 3-Bed Ward 1 | 3 | 39 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 576.576 | 1129.7684 |
| 3-Bed Ward 2 | 3 | 39 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 576.576 | 1129.7684 |
| Private Room 6 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Conference Room | 8 | 104 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 1537.536 | 3012.7157 |
| 3-Bed Ward 3 | 3 | 39 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 576.576 | 1129.7684 |
| 3-Bed Ward 4 | 3 | 39 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 576.576 | 1129.7684 |
| Private Room 7 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Private Room 8 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 384.384 | 753.17892 |
| Chief of Clinics | 5 | 12.5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 184.8 | 362.10525 |
| Delivery Room | 8 | 64 | 34.5 | 22 | 0.0181368 | 0.00821976 | 985.6 | 1904.0621 |
| Sub-Ster Room 1 | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 32.34 | 66.3264 |
| Labor Room | 6 | 48 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 709.632 | 1390.4842 |
| Pathologic Nursery | 4 | 10 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 147.84 | 289.6842 |
| Pre-mature nursery | 4 | 10 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 147.84 | 289.6842 |
| Breastfeeding room | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 73.92 | 144.8421 |
| Pre-operation area | 4 | 60 | 34.5 | 22 | 0.0181368 | 0.00821976 | 924 | 1785.0582 |
| Autoclave area | 3 | 24 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 354.816 | 695.24208 |
| Sterile Supply room | 5 | 12.5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 161.7 | 331.632 |
| Major Operating Room | 8 | 120 | 34.5 | 22 | 0.0181368 | 0.00821976 | 1848 | 3570.1164 |
| Sub-Ster Room 2 | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 32.34 | 66.3264 |
| Jan.Clo. | 1 | 2.5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 32.34 | 66.3264 |
| Clean up room | 3 | 7.5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 97.02 | 198.9792 |
| Sterile Instrument Supply Storage Area | 2 | 5 | 34.5 | 24 | 0.0181368 | 0.00929323 | 64.68 | 132.6528 |
| Anesthesia Office & Storage | 4 | 10 | 34.5 | 24 | 0.0181368 | 0.00929323 | 129.36 | 265.3056 |
| Lounge Area | 3 | 24 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 354.816 | 695.24208 |
| Recovery Room | 6 | 48 | 34.5 | 22.5 | 0.0181368 | 0.00848061 | 709.632 | 1390.4842 |
|  |  |  |  |  |  | **Total** | **20168.76** | **39472.195** |
|  |  |  |  |  |  | **Total Load** | | **59640.959** |

**Table 23.0 Second Floor for Ventilation Load**

**THIRD FLOOR**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Space** | **Occ.** | **L/s** | **To** | **Ti** | **Wo** | **Wi** | **Qs(W)** | **Ql(W)** |
| 5-Bed Ward 1 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 960.96 | 1883.0058 |
| 5-Bed Ward 2 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 960.96 | 1883.0058 |
| 5-Bed Ward 3 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 960.96 | 1883.0058 |
| 5-Bed Ward 4 | 5 | 65 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 960.96 | 1883.0058 |
| Isolation Room 1 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 1 | 1 | 13 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 192.192 | 376.60116 |
| Private Room 2 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Chief Nurse | 7 | 17.5 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 258.72 | 506.9631 |
| Treatment Room | 2 | 16 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 236.544 | 463.50912 |
| Private Room 3 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 4 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Isolation Room 2 | 1 | 13 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 192.192 | 376.60116 |
| Private Room 5 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 6 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| 3-Bed Ward 1 | 3 | 39 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 576.576 | 1129.8035 |
| 3-Bed Ward 2 | 3 | 39 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 576.576 | 1129.8035 |
| Private Room 7 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 8 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 9 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 10 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 11 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 12 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 13 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 14 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Solarium 1 | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 73.92 | 144.8466 |
| Solarium 2 | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 73.92 | 144.8466 |
| Admitting | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 73.92 | 144.8466 |
| Billing | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 73.92 | 144.8466 |
| Cashier | 2 | 5 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 73.92 | 144.8466 |
| Personel's dining | 6 | 48 | 34.5 | 24 | 0.0181368 | 0.009293235 | 620.928 | 1273.4662 |
| Private Room 15 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
| Private Room 16 | 2 | 26 | 34.5 | 22.5 | 0.0181368 | 0.00848031 | 384.384 | 753.20232 |
|  |  |  |  |  |  | **Total** | **13017.31** | **25564.241** |
|  |  |  |  |  |  | **Total Load** | | **38581.553** |

**Table 24.0 Third Floor for Ventilation Load**

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary of Data** | | | |
|  | **QS** | **QL** | **Q** |
| FIRST FLOOR | 9870.784 | 19550.091 | 29420.875 |
| SECOND FLOOR | 20168.76 | 39472.195 | 59640.959 |
| THIRD FLOOR | 13017.31 | 25564.241 | 38581.552 |
| TOTAL | **43056.854** | **19550.091** | **29420.875** |
|

**Table 25.0 Summary of Data for Ventilation Load**

1. **PARTITION LOAD**
2. **Wall Partition Load**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **FIRST FLOOR** | | | | | | |
| **Space** | **Spaces** | **U** | **A** | **Ti** | **Ti2** | **Q** |
| Power House | Hallway | 2.7144 | 22.2 | 22.5 | 28 | 331.4282 |
|  | Storage Room | 2.7144 | 11.6 | 22.5 | 24 | 47.23056 |
| Work Area | Storage Room | 2.7144 | 10.2 | 22.5 | 24 | 41.53032 |
| Storage Room | Hallway | 2.7144 | 12 | 24 | 28 | 130.2912 |
|  | Maintenance Room | 2.7144 | 11.6 | 24 | 22.5 | 47.23056 |
| Maintenance Room | Hallway | 2.7144 | 26.6 | 22.5 | 28 | 397.1167 |
|  | Maintenance Room CR | 2.7144 | 11.68 | 22.5 | 24 | 47.55629 |
| Female Toilet | Hallway | 2.7144 | 36.2 | 24 | 28 | 393.0451 |
| Male Toilet | Hallway | 2.7144 | 36.2 | 24 | 28 | 393.0451 |
| Minor Operating Room | Hallway | 2.7144 | 24.2 | 22 | 28 | 394.1309 |
|  | Emergency Room | 2.7144 | 18.8 | 22 | 22.5 | 25.51536 |
|  | Examination/Treatment OBS CR | 2.7144 | 7.72 | 22 | 24 | 41.91034 |
|  | Equipment and Supply Storage Area | 2.7144 | 11.2 | 22 | 24 | 60.80256 |
| Equipment and Supply Storage | Emergency Room | 2.7144 | 6.4 | 24 | 22.5 | 26.05824 |
| Examination/Treatment OBS | Examination/Treatment OBS CR | 2.7144 | 5.92 | 22.5 | 24 | 24.10387 |
| Emergency Room | Hallway | 2.7144 | 31.2 | 22.5 | 28 | 465.791 |
|  | Doctor's on Duty CR | 2.7144 | 3.4 | 22.5 | 24 | 13.84344 |
| Doctor's on Duty | Doctor's on Duty CR | 2.7144 | 10.4 | 22.5 | 24 | 42.34464 |
|  | Hallway | 2.7144 | 10.6 | 22.5 | 28 | 158.2495 |
| Cadaver Holding Room | Hallway | 2.7144 | 10.4 | 22.5 | 28 | 155.2637 |
|  | Supply Room | 2.7144 | 24 | 22.5 | 24 | 97.7184 |
|  | Work Area Laboratory | 2.7144 | 5.2 | 22.5 | 22 | 7.05744 |
| Supply Room | Hallway | 2.7144 | 41.6 | 24 | 28 | 451.6762 |
|  | Work Area Laboratory | 2.7144 | 22 | 24 | 22 | 119.4336 |
| Pharmacy | Bulk Storage | 2.7144 | 15.4 | 22.5 | 24 | 62.70264 |
|  | Hallway | 2.7144 | 54.2 | 22.5 | 28 | 809.1626 |
| Bulk Storage | Hallway | 2.7144 | 16.8 | 24 | 28 | 182.4077 |
| Medical Record Office | Hallway | 2.7144 | 45.32 | 22.5 | 28 | 676.5913 |
| Philhealth | Hallway | 2.7144 | 43.8 | 22.5 | 28 | 653.899 |
| Work Area Laboratory | Waiting Area CR | 2.7144 | 9 | 22 | 24 | 48.8592 |
|  | Waiting Area | 2.7144 | 19.8 | 22 | 22.5 | 26.87256 |
|  | Hallway | 2.7144 | 12.2 | 22 | 28 | 198.6941 |
| Film File Storage | Waiting Area | 2.7144 | 5.8 | 24 | 22.5 | 23.61528 |
|  | Dark Room | 2.7144 | 14.6 | 24 | 22.5 | 59.44536 |
|  | Radiologist Office | 2.7144 | 4.84 | 24 | 22.5 | 19.70654 |
| Waiting Area | Waiting Area CR | 2.7144 | 4.6 | 22.5 | 24 | 18.72936 |
|  | Hallway | 2.7144 | 16 | 22.5 | 28 | 238.8672 |
| Dark Room | Waste Disposal Area | 2.7144 | 6 | 22.5 | 24 | 24.4296 |
|  | X-Ray Room CR | 2.7144 | 6.8 | 22.5 | 24 | 27.68688 |
| Radiogist Office | Hallway | 2.7144 | 9.4 | 22.5 | 28 | 140.3345 |
| X Ray Room | Waste Disposal Area | 2.7144 | 14.32 | 22.5 | 24 | 58.30531 |
|  | Linen Storage | 2.7144 | 19.4 | 22.5 | 24 | 78.98904 |
|  | Hallway | 2.7144 | 21.72 | 22.5 | 28 | 324.2622 |
| Pressing Area | Washing Area | 2.7144 | 10.2 | 22.5 | 24 | 41.53032 |
|  | Linen Storage | 2.7144 | 10.2 | 22.5 | 24 | 41.53032 |
|  | Waste Disposal Area | 2.7144 | 8.88 | 22.5 | 24 | 36.15581 |
| Linen Storage | Hallway | 2.7144 | 10.72 | 24 | 28 | 116.3935 |
| Washing Area | Hallway | 2.7144 | 38 | 24 | 28 | 412.5888 |
| OPD Clinic Dental | Hallway | 2.7144 | 28.4 | 22.5 | 28 | 423.9893 |
| OPD Clinic Dental | Hallway | 2.7144 | 18.4 | 22.5 | 28 | 274.6973 |
| OPD Clinic Pedia | Hallway | 2.7144 | 28.4 | 22.5 | 28 | 423.9893 |
| OPD Clinic Pedia | Hallway | 2.7144 | 8.96 | 22.5 | 28 | 133.7656 |
| Elevator | Hallway | 2.7144 | 19.2 | 22.5 | 28 | 286.6406 |
| OPD Info & Admitting | Hallway | 2.7144 | 16.4 | 22.5 | 28 | 244.8389 |
| OPD Clinic Surgery | Hallway | 2.7144 | 18.64 | 22.5 | 28 | 278.2803 |
| OPD Clinic Medical | Hallway | 2.7144 | 9.2 | 22.5 | 28 | 137.3486 |
| OPD Clinic Surgery | Hallway | 2.7144 | 28.64 | 22.5 | 28 | 427.5723 |
| OPD Clinic Medical | Hallway | 2.7144 | 28.64 | 22.5 | 28 | 427.5723 |
| Cashier | Hallway | 2.7144 | 24 | 22.5 | 28 | 358.3008 |
| Billing | Hallway | 2.7144 | 11.85 | 22.5 | 28 | 176.911 |
| Admitting | Hallway | 2.7144 | 11.92 | 22.5 | 28 | 177.9561 |
| Administrative Office | Hallway | 2.7144 | 67.2 | 22.5 | 28 | 1003.242 |
| Admin Office | Hallway | 2.7144 | 16.8 | 22.5 | 28 | 250.8106 |
|  | Male Toilet | 2.7144 | 12 | 22.5 | 24 | 48.8592 |
| Social Welfare | Hallway | 2.7144 | 15 | 22.5 | 28 | 223.938 |
|  | Female Toilet | 2.7144 | 12 | 22.5 | 24 | 48.8592 |
| Male Toilet | Hallway | 2.7144 | 33 | 24 | 28 | 358.3008 |
| Female Toilet | Hallway | 2.7144 | 33 | 24 | 28 | 358.3008 |
| OPD Info & Admitting | Hallway | 2.7144 | 23.84 | 22.5 | 28 | 355.9121 |
| OPD Records | Hallway | 2.7144 | 25.2 | 22.5 | 28 | 376.2158 |
| Ultrasound | Ultrasound CR | 2.7144 | 11.8 | 22.5 | 24 | 48.04488 |
|  | Hallway | 2.7144 | 25.6 | 22.5 | 28 | 382.1875 |
| OPD Clinic OB-Gyne | Hallway | 2.7144 | 44 | 22.5 | 28 | 656.8848 |
|  | OPD Clinic OB-Gyne CR | 2.7144 | 11.8 | 22.5 | 24 | 48.04488 |
| Canteen | Hallway | 2.7144 | 24.12 | 24 | 28 | 261.8853 |
|  | Dietary | 2.7144 | 28.6 | 24 | 22.5 | 116.4478 |
| Dietary | Hallway | 2.7144 | 98.44 | 22.5 | 28 | 1469.63 |
|  | Dietitians Office CR | 2.7144 | 12.12 | 22.5 | 24 | 49.34779 |
|  | Cold Storage | 2.7144 | 6.12 | 22.5 | 24 | 24.91819 |
|  | Dry Storage | 2.7144 | 16.76 | 22.5 | 24 | 68.24002 |
|  | Garbage Disposal | 2.7144 | 8 | 22.5 | 24 | 32.5728 |
| Supply Receiving Area | Hallway | 2.7144 | 12.92 | 22.5 | 28 | 192.8853 |
|  | Cold Storage | 2.7144 | 5.04 | 22.5 | 24 | 20.52086 |
|  | Hallway | 2.7144 | 6.8 | 24 | 28 | 73.83168 |
| Dry Storage | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Dietitians Office | Dietitians Office CR | 2.7144 | 4.92 | 22.5 | 24 | 20.03227 |
|  |  |  |  |  | **Total** | **18554.54** |
| **Table 26.0 Ground Floor for Wall Partition Load**  **SECOND FLOOR** | | | | | | |
| **Space** | **Spaces** | **U** | **A** | **Ti** | **Ti2** | **Q** |
| 5 Bedward | Hallway | 2.7144 | 16.4 | 22.5 | 28 | 244.8389 |
|  | 5 Bedward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bedward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 5 Bedward | Hallway | 2.7144 | 42.4 | 22.5 | 28 | 632.9981 |
|  | 5 Bedward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bedward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 5 Bedward | Hallway | 2.7144 | 42.2 | 22.5 | 28 | 630.0122 |
|  | 5 Bedward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bedward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 5 Bedward | Hallway | 2.7144 | 16.4 | 22.5 | 28 | 244.8389 |
|  | 5 Bedward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bedward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Isolation Room | Hallway | 2.7144 | 4.28 | 22.2 | 28 | 67.38227 |
|  | Isolation Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Isolation Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
|  | Chief of Hospital CR | 2.7144 | 3 | 22.5 | 24 | 12.2148 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 28.4 | 22.5 | 28 | 423.9893 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Chief Nurse | Hallway | 2.7144 | 63.6 | 22.5 | 28 | 949.4971 |
|  | Chief Nurse CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Chief Nurse CR | Hallway | 2.7144 | 14.8 | 24 | 28 | 160.6925 |
| Treatment Room | Hallway | 2.7144 | 51.8 | 22.5 | 28 | 773.3326 |
| Dirty Utility | Hallway | 2.7144 | 29.76 | 24 | 28 | 323.1222 |
| Clean Linen | Hallway | 2.7144 | 11.44 | 24 | 28 | 124.2109 |
| Nurse Station CR | Hallway | 2.7144 | 18.72 | 24 | 28 | 203.2543 |
| Private Room | Hallway | 2.7144 | 28.2 | 22.5 | 28 | 421.0034 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Isolation Room | Hallway | 2.7144 | 4.32 | 22.5 | 28 | 64.49414 |
|  | Isolation Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Isolation Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Reception | Chief of Hospital CR | 2.7144 | 12 | 22.5 | 24 | 48.8592 |
|  | Hallway | 2.7144 | 10.4 | 22.5 | 28 | 155.2637 |
| Chief of Hospital | Hallway | 2.7144 | 10.2 | 22.5 | 28 | 152.2778 |
|  | Chief of Hospital CR | 2.7144 | 9.6 | 22.5 | 24 | 39.08736 |
| Conference Room | Hallway | 2.7144 | 22 | 22.5 | 28 | 328.4424 |
| Chief of Clinics | Hallway | 2.7144 | 13.2 | 22.5 | 28 | 197.0654 |
|  | Labor Room CR | 2.7144 | 12 | 22.5 | 24 | 48.8592 |
|  | Chief of Clinics CR | 2.7144 | 10.4 | 22.5 | 24 | 42.34464 |
|  | Delivery Room | 2.7144 | 15.32 | 22.5 | 22 | 20.7923 |
| 3 Bed Ward | 3 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
|  | Hallway | 2.7144 | 51.52 | 22.5 | 28 | 769.1524 |
| 3 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 3 Bed Ward | 3 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
|  | Hallway | 2.7144 | 54.68 | 22.5 | 28 | 816.3287 |
| 3 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Elevator | Hallway | 2.7144 | 36.16 | 22.5 | 28 | 539.8399 |
| 3 Bed Ward | 3 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
|  | Hallway | 2.7144 | 47 | 22.5 | 28 | 701.6724 |
| 3 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 3 Bed Ward | 3 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
|  | Hallway | 2.7144 | 56.08 | 22.5 | 28 | 837.2295 |
| 3 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
|  | Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Delivery Room | Labor Room CR | 2.7144 | 6.2 | 22 | 24 | 33.65856 |
|  | Subster Room | 2.7144 | 6.6 | 22 | 22.5 | 8.95752 |
|  | Hallway | 2.7144 | 30.6 | 22 | 28 | 498.3638 |
| Subster Room | Labor Room CR | 2.7144 | 12 | 22.5 | 24 | 48.8592 |
|  | Hallway | 2.7144 | 11.2 | 22.5 | 28 | 167.207 |
| Labor Room | Hallway | 2.7144 | 39 | 22.5 | 28 | 582.2388 |
| Pathologic Nursery | Hallway | 2.7144 | 15.6 | 22.5 | 28 | 232.8955 |
| Pre-mature Nursery | Hallway | 2.7144 | 15.92 | 22.5 | 28 | 237.6729 |
| Breastfeeding Room | Hallway | 2.7144 | 9 | 22.5 | 28 | 134.3628 |
|  | Pre-Operation Area | 2.7144 | 15.6 | 22.5 | 22 | 21.17232 |
| Work Area | Hallway | 2.7144 | 48 | 22.5 | 28 | 716.6016 |
|  | Pre-Operation Area | 2.7144 | 5.4 | 22.5 | 22 | 7.32888 |
| Pre Operation Area | Hallway | 2.7144 | 48.8 | 22 | 28 | 794.7763 |
| CSSR | Hallway | 2.7144 | 52.72 | 22.5 | 28 | 787.0674 |
|  | Autoclave Area CR | 2.7144 | 17 | 22.5 | 24 | 69.2172 |
|  | Sterile Supply Room | 2.7144 | 24.12 | 22.5 | 24 | 98.20699 |
| Sterile Supply Room | Recovery Room | 2.7144 | 12 | 24 | 22.5 | 48.8592 |
| Recovery Room | Hallway | 2.7144 | 24.6 | 22.5 | 28 | 367.2583 |
|  | Recovery Room CR | 2.7144 | 11.96 | 22.5 | 24 | 48.69634 |
| Major Operating Room | Hallway | 2.7144 | 36.2 | 22 | 28 | 589.5677 |
|  | Subster Room | 2.7144 | 7.2 | 22 | 22.5 | 9.77184 |
| Subster Room | Clean up Room | 2.7144 | 9 | 22.5 | 24 | 36.6444 |
|  | Hallway | 2.7144 | 10.72 | 22.5 | 28 | 160.041 |
| Clean up Room | Hallway | 2.7144 | 7 | 24 | 28 | 76.0032 |
| Jan. Clo | Hallway | 2.7144 | 16.8 | 24 | 28 | 182.4077 |
| Sterile Instrument Supply | Hallway | 2.7144 | 9.92 | 24 | 28 | 107.7074 |
| Anesthesia Office & Storage | Hallway | 2.7144 | 22.52 | 24 | 28 | 244.5132 |
| DR 1 | Lounge Area | 2.7144 | 5 | 24 | 22.5 | 20.358 |
| DR 2 | Lounge Area | 2.7144 | 5 | 24 | 22.5 | 20.358 |
| DR 3 | Lounge Area | 2.7144 | 23 | 24 | 22.5 | 93.6468 |
| Lounge Area | Hallway | 2.7144 | 60.6 | 22 | 28 | 986.9558 |
|  |  |  |  |  | **Total** | **19890.59** |
| **Table 27.0 Second Floor for Wall Partition Load**  **THIRD FLOOR** | | | | | | |
| **Space** | **Spaces** | **U** | **A** | **Ti** | **Ti2** | **Q** |
| 5 Bed Ward | Hallway | 2.7144 | 16.4 | 22.5 | 28 | 244.8389 |
| 5 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 5 Bed Ward | Hallway | 2.7144 | 42.4 | 22.5 | 28 | 632.9981 |
| 5 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 5 Bed Ward | Hallway | 2.7144 | 42.4 | 22.5 | 28 | 632.9981 |
| 5 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| 5 Bed Ward | Hallway | 2.7144 | 16.4 | 22.5 | 28 | 244.8389 |
| 5 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 5 Bed Ward CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Isolation Room | Hallway | 2.7144 | 4.28 | 22.5 | 28 | 63.89698 |
| Isolation Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Isolation Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 30.8 | 22.5 | 28 | 459.8194 |
| Private Room CR | 2.7144 | 14.8 | 22.5 | 24 | 60.25968 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Chief Nurse | Hallway | 2.7144 | 62.4 | 22.5 | 28 | 931.5821 |
| Chief Nurse CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Chief Nurse CR | Hallway | 2.7144 | 14.8 | 24 | 28 | 160.6925 |
| Treatment Room | Hallway | 2.7144 | 60.2 | 22.5 | 28 | 898.7378 |
| Dirty Utility | Hallway | 2.7144 | 29.76 | 24 | 28 | 323.1222 |
| Clean Utility | Hallway | 2.7144 | 11.44 | 24 | 28 | 124.2109 |
| Nurse Station CR | Hallway | 2.7144 | 18.72 | 24 | 28 | 203.2543 |
| Private Room | Hallway | 2.7144 | 28.4 | 22.5 | 28 | 423.9893 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Isolation Room | Hallway | 2.7144 | 4.32 | 22.5 | 28 | 64.49414 |
| Isolation Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Isolation Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Solarium | Hallway | 2.7144 | 11.8 | 22.5 | 28 | 176.1646 |
| Water Tank | 2.7144 | 15.2 | 22.5 | 24 | 61.88832 |
| 3 Bed Ward | Hallway | 2.7144 | 42.08 | 22.5 | 28 | 628.2207 |
| 3 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 3 Bed Ward CR | Hallway | 2.7144 | 9.4 | 24 | 28 | 102.0614 |
| Private Room | 2.7144 | 5.4 | 24 | 22.5 | 21.98664 |
| Private Room | Hallway | 2.7144 | 24.76 | 22.5 | 28 | 369.647 |
| Private Room CR | 2.7144 | 13.44 | 22.5 | 24 | 54.7223 |
| Private Room CR | Hallway | 2.7144 | 5.44 | 24 | 28 | 59.06534 |
| Private Room | Hallway | 2.7144 | 24.36 | 22.5 | 28 | 363.6753 |
| Private Room CR | 2.7144 | 13.36 | 22.5 | 24 | 54.39658 |
| Private Room CR | Hallway | 2.7144 | 5.36 | 24 | 28 | 58.19674 |
| Elevator | Hallway | 2.7144 | 27.04 | 22.5 | 28 | 2055.127 |
| 3 Bed Ward | Hallway | 2.7144 | 42.2 | 22.5 | 28 | 630.0122 |
| 3 Bed Ward CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| 3 Bed Ward CR | Hallway | 2.7144 | 9.4 | 24 | 28 | 102.0614 |
| Private Room | 2.7144 | 5.4 | 24 | 22.5 | 21.98664 |
| Private Room | Hallway | 2.7144 | 24.36 | 22.5 | 28 | 363.6753 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 24.84 | 22.5 | 28 | 370.8413 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Private Room | Hallway | 2.7144 | 4.4 | 22.5 | 28 | 65.68848 |
| Private Room CR | 2.7144 | 13.4 | 22.5 | 24 | 54.55944 |
| Private Room CR | Hallway | 2.7144 | 5.4 | 24 | 28 | 58.63104 |
| Solarium | Hallway | 2.7144 | 11.8 | 22.5 | 28 | 176.1646 |
| Waiting Area | Hallway | 2.7144 | 52.8 | 22.5 | 28 | 788.2618 |
| Personel's Dining | 2.7144 | 8.8 | 22.5 | 24 | 35.83008 |
| Cashier | Personel's Dining | 2.7144 | 12 | 22.5 | 24 | 48.8592 |
| Personel's Dining | Hallway | 2.7144 | 22.4 | 24 | 28 | 243.2102 |
| Female Toilet | Hallway | 2.7144 | 34.92 | 24 | 28 | 379.1474 |
| Male Toilet | Hallway | 2.7144 | 10.72 | 24 | 28 | 116.3935 |
| Water Tank | Hallway | 2.7144 | 16.4 | 24 | 28 | 178.0646 |
|  |  |  |  |  | **Total** | **17107.4** |

**Table 28.0 Third floor Floor for Wall Partition Load**

|  |  |
| --- | --- |
| **Summary of Data** | |
|  | **Q** |
| FIRST FLOOR | 18554.53907 |
| SECOND FLOOR | 19890.59118 |
| THIRD FLOOR | 17107.39742 |
| TOTAL | **55552.52767** |
|

**Table 29.0 Summary of Data for Wall Partition Load**

1. **Door Partition Load**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **FIRST FLOOR** | | | | | | |
| **Space 1** | **Space 2** | **U** | **Area** | **Ti** | **To** | **Qs (W)** |
| Power House | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Work Area | Storage Room | 1.5625 | 1.8 | 22.5 | 24 | 4.21875 |
| Maintenance Room | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Maintenance Room CR | 1.6048 | 1.6 | 22.5 | 24 | 3.85152 |
| Female Toilet | Hallway | 2.3576 | 1.8 | 24 | 28 | 16.97472 |
| Male Toilet | Hallway | 2.3576 | 1.8 | 24 | 28 | 16.97472 |
| Emergency Room | Examination/Treatment Obs Area CR | 2.3576 | 1.8 | 22.5 | 24 | 6.36552 |
| Hallway | 2.3576 | 3.6 | 22.5 | 28 | 46.68048 |
| Hallway | 2.3576 | 3.6 | 22.5 | 28 | 46.68048 |
| Doctor's on Duty CR | 2.3576 | 1.6 | 22.5 | 24 | 5.65824 |
| Minor Operating Room | Emergency Room | 2.3576 | 3.2 | 22 | 22.5 | 3.77216 |
| Equipment and Supply Storage Area | Emergency Room | 2.3576 | 1.8 | 24 | 22.5 | 6.36552 |
| Cadaver Holding Room | Hallway | 2.3576 | 3.6 | 22.5 | 28 | 46.68048 |
| Supply Room | Hallway | 2.3576 | 2 | 22.5 | 28 | 25.9336 |
| Pharmacy | Bulk Storage | 1.5625 | 1.8 | 22.5 | 24 | 4.21875 |
| Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Medical Records Office | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| PhilHealth | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Work Area Laboratory | Waiting Area | 2.3576 | 1.8 | 22 | 22.5 | 2.12184 |
| Waiting Area | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Waiting Area CR | 1.6048 | 1.8 | 22.5 | 24 | 4.33296 |
| OPD Clinic Dental 1 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| OPD Clinic Dental 2 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| OPD Clinic Surgery 1 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| OPD Clinic Surgery 2 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Cashier | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Billing | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Admitting | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Radiologist Office | Film File Storage Room | 2.3576 | 1.8 | 22.5 | 24 | 6.36552 |
| Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| XRAY Room | XRAY Room CR | 1.6048 | 1.8 | 22.5 | 24 | 4.33296 |
| Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| OPD Clinic Pedia 1 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| OPD Clinic Pedia 2 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| OPD Info & Admitting | Hallway | 2.3576 | 1.6 | 22.5 | 28 | 20.74688 |
| OPD Clinic Medical 1 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| OPD Clinic Medical 2 | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Pressing Area | Washing Area | 2.3576 | 1.8 | 22.5 | 24 | 6.36552 |
| Linen Storage | 2.3576 | 1.8 | 22.5 | 24 | 6.36552 |
| Washing Area | Hallway | 2.3576 | 2 | 22.5 | 28 | 25.9336 |
| Washing Area CR | 1.6048 | 1.6 | 22.5 | 24 | 3.85152 |
| Administrative Office | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Social Welfare | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Male Toilet | Hallway | 2.3576 | 1.8 | 24 | 28 | 16.97472 |
| Female Toilet | Hallway | 2.3576 | 1.8 | 24 | 28 | 16.97472 |
| OPD Info Admitting | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Ultrasound | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Ultrasound CR | 1.6048 | 1.8 | 22.5 | 24 | 4.33296 |
| Dietary | Dry Storage | 1.5625 | 1.2 | 22.5 | 24 | 2.8125 |
| Cold Storage | 1.5625 | 1.2 | 22.5 | 24 | 2.8125 |
| Supply Receive Area | 2.3576 | 1.8 | 22.5 | 24 | 6.36552 |
| Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Canteen | 1.5625 | 2.4 | 22.5 | 24 | 5.625 |
| Dietician's Office | Dietician's Office CR | 1.6048 | 1.6 | 22.5 | 24 | 3.85152 |
| Canteen | Hallway | 2.3576 | 4 | 24 | 28 | 37.7216 |
| OPD Clinic OB-Gyne | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | OPD Clinic OB-Gyne | 1.6048 | 1.8 | 22.5 | 24 | 4.33296 |
|  |  |  |  |  | **Total** | **1147.923** |
| **Table 30.0 Ground Floor for Door Partition Load**  **SECOND FLOOR** | | | | | | |
| **Space 1** | **Space 2** | **U** | **Area** | **Ti** | **To** | **Qs (W)** |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Isolation Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Isolation Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Chief Nurse | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Chief Nurse CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Treatment Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Dirty Utility | Hallway | 2.3576 | 1.2 | 24 | 28 | 11.31648 |
| Clean Linen | Hallway | 2.3576 | 1.2 | 24 | 28 | 11.31648 |
| Nurse Station CR | Hallway | 2.3576 | 1.2 | 24 | 28 | 11.31648 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Isolation Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Isolation Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Reception | Hallway | 2.3576 | 1.6 | 22.5 | 28 | 20.74688 |
| Chief of Hospital | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Chief of Hospital CR | 1.6048 | 1.2 | 22.5 | 24 | 2.88864 |
| 3 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 3 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 3 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 3 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Conference Room | Hallway | 2.3576 | 2 | 22.5 | 28 | 25.9336 |
| 3 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 3 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 3 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| 3 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Chief of Clinics | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| Chief of Clinics CR | 1.6048 | 1.2 | 22.5 | 24 | 2.88864 |
| CSSR | Hallway | 2.3576 | 2 | 22.5 | 28 | 25.9336 |
| Sterile Supply Room | 2.3576 | 1.8 | 22.5 | 24 | 6.36552 |
| Delivery Room | Hallway | 2.3576 | 3.2 | 22 | 28 | 45.26592 |
| Sub Ster Room | 2.3576 | 1.8 | 22 | 24 | 8.48736 |
| Labor Room | Labor Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Hallway | 2.3576 | 2 | 22.5 | 28 | 25.9336 |
| Hallway | 2.3576 | 3.2 | 22.5 | 28 | 41.49376 |
| Breast Feeding Room | Hallway | 2.3576 | 1.6 | 22.5 | 28 | 20.74688 |
| Pre Operation Area | Hallway | 2.3576 | 1.8 | 22 | 28 | 25.46208 |
| Major Operating Room | Hallway | 2.3576 | 3.2 | 22 | 28 | 45.26592 |
| Sub Ster Room | 2.3576 | 1.8 | 22 | 24 | 8.48736 |
| Jan. Clo | Hallway | 2.3576 | 1.4 | 24 | 28 | 13.20256 |
| Clean Up Room | Hallway | 2.3576 | 2 | 24 | 28 | 18.8608 |
| Sterile Instrument Supply Storage Area | Hallway | 2.3576 | 1.6 | 24 | 28 | 15.08864 |
| Anesthesia Office and Storage | Hallway | 2.3576 | 1.8 | 24 | 28 | 16.97472 |
| Lounge Area | Hallway | 2.3576 | 1.6 | 22.5 | 28 | 20.74688 |
| Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
| DR 1 | 1.6048 | 1.2 | 22.5 | 24 | 2.88864 |
| DR 2 | 1.6048 | 1.2 | 22.5 | 24 | 2.88864 |
| DR 3 | 1.6048 | 1.2 | 22.5 | 24 | 2.88864 |
| Recovery Room | Hallway | 2.3576 | 3.2 | 22.5 | 28 | 41.49376 |
| Recovery Room CR | 1.6048 | 1.2 | 22.5 | 24 | 2.88864 |
|  |  |  |  |  | **Total** | **1229.82** |
| **THIRD FLOOR** | **Table 31.0 Second Floor for Door Partition Load** |  |  |  |  |  |
| **Space 1** | **Space 2** | **U** | **Area** | **Ti** | **To** | **Qs (W)** |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 5 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | 5 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Isolation Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Isolation Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Chief Nurse | Hallway | 2.3576 | 1.8 | 22.5 | 28 | 23.34024 |
|  | Chief Nurse CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Treatment Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Dirty Utility | Hallway | 2.3576 | 1.2 | 24 | 28 | 11.31648 |
| Clean Linen | Hallway | 2.3576 | 1.2 | 24 | 28 | 11.31648 |
| Nurse Station CR | Hallway | 2.3576 | 1.2 | 24 | 28 | 11.31648 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Isolation Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Isolation Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 3 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | 3 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| 3 Bed Ward | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | 3 Bed Ward CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Private Room | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
|  | Private Room CR | 1.6048 | 1.4 | 22.5 | 24 | 3.37008 |
| Solarium | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Solarium | Hallway | 2.3576 | 2.4 | 22.5 | 28 | 31.12032 |
| Waiting Area | Hallway | 2.3576 | 3.2 | 22.5 | 28 | 41.49376 |
|  | Personel's Dinning | 2.3576 | 3.2 | 22.5 | 24 | 11.31648 |
| Male Toilet | Hallway | 2.3576 | 1.8 | 24 | 28 | 16.97472 |
| Female Toilet | Hallway | 2.3576 | 1.8 | 24 | 28 | 16.97472 |
|  |  |  |  |  | **Total** | **1068.55** |

**Table 32.0 Third Floor for Door Partition Load**

|  |  |
| --- | --- |
| **Summary of Data** | |
|  | **Q** |
| FIRST FLOOR | 1147.92278 |
| SECOND FLOOR | 1229.81976 |
| THIRD FLOOR | 1068.55 |
| TOTAL | **3446.29254** |
|

**Table 33.0 Summary of Data for Door Partition Load**

1. **LIGHTING LOAD**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Ground Floor** | | | | | |
| **SPACE** | **W** | **Fu** | **Fb** | **CLF** | **Qs (W)** |
| 1.1 Power House | 486.7018 | 0.75 | 1.2 | 0.94 | 411.7497 |
| 1.2 Work Area | 125.4656 | 0.75 | 1.2 | 0.94 | 106.1439 |
| 1.3 Storage Room | 101.6275 | 0.5 | 1.2 | 0.94 | 57.31791 |
| 1.4 Maintenance Office | 212.0235 | 0.5 | 1.2 | 0.94 | 119.5813 |
| 1.5 Female toilet | 237.8883 | 0.5 | 1.2 | 0.94 | 134.169 |
| 1.6 Male Toilet | 238.5032 | 0.5 | 1.2 | 0.94 | 134.5158 |
| 1.7 Minor Operating Room | 304.0518 | 0.5 | 1.2 | 0.94 | 171.4852 |
| 1.8 Equipment and supply storage area | 72.93 | 0.75 | 1.2 | 0.94 | 61.69878 |
| 1.9 Examination/Treatment Area | 548.5025 | 0.75 | 1.2 | 0.94 | 464.0331 |
| 1.10 Cadaver Holding Room | 255.2914 | 0.5 | 1.2 | 0.94 | 143.9843 |
| 1.11 Supply Room | 406.7609 | 0.5 | 1.2 | 0.94 | 229.4131 |
| 1.12 Bulk Storage | 51.7036 | 0.5 | 1.2 | 0.94 | 29.16083 |
| 1.13 Pharmacy | 269.7331 | 0.75 | 1.2 | 0.94 | 228.1942 |
| 1.14 Medical Records Office | 233.3656 | 0.75 | 1.2 | 0.94 | 197.4273 |
| 1.15 Medical Records | 242.2004 | 0.75 | 1.2 | 0.94 | 204.9015 |
| 1.16 PHILHEALTH | 222.7914 | 0.5 | 1.2 | 0.94 | 125.6543 |
| 1.17 Doctor's Duty | 150.8806 | 0.5 | 1.2 | 0.94 | 85.09666 |
| 1.18 Nurse Station (ER) | 1702.587 | 0.75 | 1.2 | 0.94 | 1440.388 |
| 1.21 Work Area (laboratory) | 427.18 | 0.75 | 1.2 | 0.94 | 361.3943 |
| 1.23 Waiting area | 164.8075 | 0.75 | 1.2 | 0.94 | 139.4271 |
| 1.24 OPD clinic dental 1 | 186.9543 | 0.5 | 1.2 | 0.94 | 105.4422 |
| 1.25 OPD clinic dental 2 | 186.9543 | 0.5 | 1.2 | 0.94 | 105.4422 |
| 1.27 OPD clinic surgery 1 | 187.6628 | 0.5 | 1.2 | 0.94 | 105.8418 |
| 1.28 OPD clinic surgery 2 | 187.6628 | 0.5 | 1.2 | 0.94 | 105.8418 |
| 1.29 Cashier | 71.3375 | 0.75 | 1.2 | 0.94 | 60.35153 |
| 1.30 Billing | 71.63 | 0.75 | 1.2 | 0.94 | 60.59898 |
| 1.31 Admitting | 73.2719 | 0.75 | 1.2 | 0.94 | 61.98803 |
| 1.32 Film File Storage | 71.7639 | 0.5 | 1.2 | 0.94 | 40.47484 |
| 1.33 Radiologist Office | 118.9396 | 0.5 | 1.2 | 0.94 | 67.08193 |
| 1.34 Dark Room | 64.3786 | 0.5 | 1.2 | 0.94 | 36.30953 |
| 1.35 Control Booth | 328.2994 | 0.5 | 1.2 | 0.94 | 185.1609 |
| 1.37 OPD Clinic Pedia 1 | 186.9543 | 0.5 | 1.2 | 0.94 | 105.4422 |
| 1.38 OPD Clinic Pedia 2 | 186.9543 | 0.5 | 1.2 | 0.94 | 105.4422 |
| 1.39 OPD Records | 135.434 | 0.5 | 1.2 | 0.94 | 76.38478 |
| 1.40 OPD info. And admitting | 129.7465 | 0.5 | 1.2 | 0.94 | 73.17703 |
| 1.41 OPD Clinic Medical 1 | 187.6628 | 0.5 | 1.2 | 0.94 | 105.8418 |
| 1.42 OPD Clinic Medical 2 | 187.6628 | 0.5 | 1.2 | 0.94 | 105.8418 |
| 1.43 Hospital Main Lobby | 8530.327 | 1 | 1.2 | 0.94 | 9622.209 |
| 1.46 Pressing Area | 109.603 | 0.5 | 1.2 | 0.94 | 61.81609 |
| 1.47 Linen Storage | 108.0781 | 0.5 | 1.2 | 0.94 | 60.95605 |
| 1.49 Linen Office | 109.6875 | 0.5 | 1.2 | 0.94 | 61.86375 |
| 1.50 Admin Office | 176.891 | 0.5 | 1.2 | 0.94 | 99.76652 |
| 1.51 Male Toilet | 224.3787 | 0.5 | 1.2 | 0.94 | 126.5496 |
| 1.53 Washing Area | 222.6471 | 0.5 | 1.2 | 0.94 | 125.573 |
| 1.54 Receiving Sorting Area | 111.4243 | 0.5 | 1.2 | 0.94 | 62.84331 |
| 1.56 Social Welfare | 176.7792 | 0.5 | 1.2 | 0.94 | 99.70347 |
| 1.57 Female Toilet | 221.5564 | 0.5 | 1.2 | 0.94 | 124.9578 |
| 1.58 OPD Info. And admitting | 135.7421 | 0.5 | 1.2 | 0.94 | 76.55854 |
| 1.59 OPD records | 150.6947 | 0.5 | 1.2 | 0.94 | 84.99181 |
| 1.60 Ultrasound | 247.9997 | 0.5 | 1.2 | 0.94 | 139.8718 |
| 1.61 Cooking Area | 444.7976 | 0.5 | 1.2 | 0.94 | 250.8658 |
| 1.62 Dry storage | 33.7233 | 0.5 | 1.2 | 0.94 | 19.01994 |
| 1.63 Cold Storage | 25.5125 | 0.5 | 1.2 | 0.94 | 14.38905 |
| 1.64 Supply Receiving Area | 74.3392 | 0.75 | 1.2 | 0.94 | 62.89096 |
| 1.65 Dietician's Office | 119.925 | 0.5 | 1.2 | 0.94 | 67.6377 |
| 1.66 Dietary | 494.4225 | 0.5 | 1.2 | 0.94 | 278.8543 |
| 1.67 Staff Dining | 661.5453 | 0.75 | 1.2 | 0.94 | 559.6673 |
| 1.68 OPD clinic Ob-gyne | 351.0728 | 0.5 | 1.2 | 0.94 | 198.0051 |
| 1.70 Canteen | 2362.09 | 0.5 | 1.2 | 0.94 | 1332.219 |
|  |  |  |  | **Total** | **19883.61** |
| **Table 34.0 Ground Floor for Lighting Load**  **SECOND FLOOR** | | | | | |
| **SPACE** | **W** | **Fu** | **Fb** | **CLF** | **Qs (W)** |
| 5-Bed Ward 1 | 445.5997 | 0.75 | 1.2 | 0.94 | 376.9773 |
| 5-Bed Ward 2 | 445.38 | 0.75 | 1.2 | 0.94 | 376.7915 |
| 5-Bed Ward 3 | 445.77 | 0.75 | 1.2 | 0.94 | 377.1214 |
| 5-Bed Ward 4 | 443.5275 | 0.75 | 1.2 | 0.94 | 375.2243 |
| Isolation Room 1 | 177.7594 | 0.75 | 1.2 | 0.94 | 150.3845 |
| Private Room 1 | 180.9678 | 0.75 | 1.2 | 0.94 | 153.0988 |
| Private Room 2 | 180.3802 | 0.75 | 1.2 | 0.94 | 152.6016 |
| Chief Nurse | 399.256 | 0.5 | 1.2 | 0.94 | 225.1804 |
| Treatment Room | 233.2369 | 0.75 | 1.2 | 0.94 | 197.3184 |
| Nurse Station | 296.777 | 0.75 | 1.2 | 0.94 | 251.0733 |
| Dirty Utility | 62.2297 | 0.5 | 1.2 | 0.94 | 35.09755 |
| Clean Linen | 31.9553 | 0.5 | 1.2 | 0.94 | 18.02279 |
| Private Room 3 | 180.3555 | 0.75 | 1.2 | 0.94 | 152.5808 |
| Private Room 4 | 180.6064 | 0.75 | 1.2 | 0.94 | 152.793 |
| Isolation Room 2 | 178.1858 | 0.75 | 1.2 | 0.94 | 150.7452 |
| Reception | 143.6786 | 0.5 | 1.2 | 0.94 | 81.03473 |
| Private Room 5 | 177.8569 | 0.75 | 1.2 | 0.94 | 150.4669 |
| Chief of Hospital | 243.5147 | 0.5 | 1.2 | 0.94 | 137.3423 |
| 3-Bed Ward 1 | 329.836 | 0.75 | 1.2 | 0.94 | 279.0413 |
| 3-Bed Ward 2 | 331.24 | 0.75 | 1.2 | 0.94 | 280.229 |
| Private Room 6 | 178.7656 | 0.75 | 1.2 | 0.94 | 151.2357 |
| Conference Room | 499.8981 | 0.5 | 1.2 | 0.94 | 281.9425 |
| 3-Bed Ward 3 | 329.836 | 0.75 | 1.2 | 0.94 | 279.0413 |
| 3-Bed Ward 4 | 331.24 | 0.75 | 1.2 | 0.94 | 280.229 |
| Private Room 7 | 178.7656 | 0.75 | 1.2 | 0.94 | 151.2357 |
| Private Room 8 | 178.7656 | 0.75 | 1.2 | 0.94 | 151.2357 |
| Chief of Clinics | 277.7008 | 0.5 | 1.2 | 0.94 | 156.6233 |
| CSSR | 408.7044 | 0.5 | 1.2 | 0.94 | 230.5093 |
| Delivery Room | 454.8206 | 0.75 | 1.2 | 0.94 | 384.7782 |
| Sub-Ster Room 1 | 70.3443 | 0.75 | 1.2 | 0.94 | 59.51128 |
| Labor Room | 334.7318 | 0.75 | 1.2 | 0.94 | 283.1831 |
| Pathologic Nursery | 218.3922 | 0.75 | 1.2 | 0.94 | 184.7598 |
| Pre-mature nursery | 218.3987 | 0.75 | 1.2 | 0.94 | 184.7653 |
| Breastfeeding room | 132.9354 | 0.5 | 1.2 | 0.94 | 74.97557 |
| Pre-operation area | 247.0091 | 0.5 | 1.2 | 0.94 | 139.3131 |
| Autoclave area | 194.8375 | 0.5 | 1.2 | 0.94 | 109.8884 |
| Sterile supply room | 280.8078 | 0.75 | 1.2 | 0.94 | 237.5634 |
| Work Area 1 | 306.8039 | 0.75 | 1.2 | 0.94 | 259.5561 |
| Major Operating Room | 455.5525 | 0.5 | 1.2 | 0.94 | 256.9316 |
| Sub-Ster Room 2 | 73.9856 | 0.75 | 1.2 | 0.94 | 62.59182 |
| Jan.Clo. | 53.7394 | 0.5 | 1.2 | 0.94 | 30.30902 |
| Clean Up Room | 167.83 | 0.5 | 1.2 | 0.94 | 94.65612 |
| Sterile instrument supply Storage Area | 97.2192 | 0.75 | 1.2 | 0.94 | 82.24744 |
| Anesthesia Office and Storage | 227.7691 | 0.75 | 1.2 | 0.94 | 192.6927 |
| DR-1 | 36.4 | 0.5 | 1.2 | 0.94 | 20.5296 |
| DR-2 | 36.4 | 0.5 | 1.2 | 0.94 | 20.5296 |
| DR-3 | 36.4 | 0.5 | 1.2 | 0.94 | 20.5296 |
| Lounge Area | 536.9273 | 0.75 | 1.2 | 0.94 | 454.2405 |
| Recovery Room | 610.6646 | 0.75 | 1.2 | 0.94 | 516.6223 |
| Hallway | 8903.917 | 0.75 | 1.2 | 0.94 | 7532.714 |
|  |  |  |  | **Total** | **16958.07** |
| **Table 35.0 Second Floor for Lighting Load**  **THIRD FLOOR** | | | | | |
| **SPACE** | **W** | **Fu** | **Fb** | **CLF** | **Qs (W)** |
| 5-Bed Ward 1 | 445.5997 | 0.75 | 1.2 | 0.94 | 376.9773 |
| 5-Bed Ward 2 | 445.38 | 0.75 | 1.2 | 0.94 | 376.7915 |
| Waiting Area 1 | 486.3131 | 0.5 | 1.2 | 0.94 | 274.2806 |
| Waiting Area 2 | 486.3131 | 0.5 | 1.2 | 0.94 | 274.2806 |
| 5-Bed Ward 3 | 445.38 | 0.75 | 1.2 | 0.94 | 376.7915 |
| 5-Bed Ward 4 | 445.38 | 0.75 | 1.2 | 0.94 | 376.7915 |
| Isolation Room 1 | 131.8109 | 0.75 | 1.2 | 0.94 | 111.512 |
| Private Room 1 | 180.9886 | 0.75 | 1.2 | 0.94 | 153.1164 |
| Private Room 2 | 180.3594 | 0.75 | 1.2 | 0.94 | 152.5841 |
| Chief Nurse | 399.256 | 0.5 | 1.2 | 0.94 | 225.1804 |
| Treatment Room | 233.2369 | 0.5 | 1.2 | 0.94 | 131.5456 |
| Nurse Station | 296.777 | 0.75 | 1.2 | 0.94 | 251.0733 |
| Dirty Utility | 62.2297 | 0.5 | 1.2 | 0.94 | 35.09755 |
| Clean Linen | 31.9553 | 0.5 | 1.2 | 0.94 | 18.02279 |
| Private Room 3 | 180.3555 | 0.75 | 1.2 | 0.94 | 152.5808 |
| Private Room 4 | 180.6064 | 0.75 | 1.2 | 0.94 | 152.793 |
| Isolation Room 2 | 132.2308 | 0.75 | 1.2 | 0.94 | 111.8673 |
| Private Room 5 | 206.2047 | 0.75 | 1.2 | 0.94 | 174.4492 |
| Privaate Room 6 | 206.2047 | 0.75 | 1.2 | 0.94 | 174.4492 |
| 3-Bed Ward 1 | 322.179 | 0.75 | 1.2 | 0.94 | 272.5634 |
| 3-Bed Ward 2 | 323.5817 | 0.75 | 1.2 | 0.94 | 273.7501 |
| Private Room 7 | 177.8569 | 0.75 | 1.2 | 0.94 | 150.4669 |
| Private Room 8 | 178.7656 | 0.75 | 1.2 | 0.94 | 151.2357 |
| Private Room 9 | 208.1456 | 0.75 | 1.2 | 0.94 | 176.0912 |
| Private Room 10 | 208.1456 | 0.75 | 1.2 | 0.94 | 176.0912 |
| Private Room 11 | 178.7656 | 0.75 | 1.2 | 0.94 | 151.2357 |
| Private Room 12 | 178.7656 | 0.75 | 1.2 | 0.94 | 151.2357 |
| Waiting Area | 305.2777 | 0.75 | 1.2 | 0.94 | 258.2649 |
| Private Room 13 | 139.8436 | 0.75 | 1.2 | 0.94 | 118.3077 |
| Private Room 14 | 147.095 | 0.75 | 1.2 | 0.94 | 124.4424 |
| Solarium 1 | 173.0079 | 0.5 | 1.2 | 0.94 | 97.57646 |
| Stretcher's Wheelchair Nook 1 | 144.1336 | 1 | 1.2 | 0.94 | 162.5827 |
| Stretcher's Wheelchair Nook 2 | 107.575 | 1 | 1.2 | 0.94 | 121.3446 |
| Solarium 2 | 175.0775 | 0.5 | 1.2 | 0.94 | 98.74371 |
| Water Tank | 2391.269 | 0.75 | 1.2 | 0.94 | 2023.014 |
| Chapel | 765.1813 | 1 | 1.2 | 0.94 | 863.1245 |
| Male Toilet | 226.7876 | 0.75 | 1.2 | 0.94 | 191.8623 |
| Female Toilet | 227.2478 | 0.75 | 1.2 | 0.94 | 192.2516 |
| Waiting Area | 566.6882 | 0.5 | 1.2 | 0.94 | 319.6121 |
| Admitting | 141.7078 | 0.75 | 1.2 | 0.94 | 119.8848 |
| Billing | 140.1803 | 0.75 | 1.2 | 0.94 | 118.5925 |
| Cashier | 122.4119 | 0.75 | 1.2 | 0.94 | 103.5605 |
| Personel's dining | 350.9454 | 0.75 | 1.2 | 0.94 | 296.8998 |
| Hospital main lobby | 10504.1 | 1 | 1.2 | 0.94 | 11848.62 |
| Private Room 15 | 145.6 | 0.75 | 1.2 | 0.94 | 123.1776 |
| Private Room 16 | 139.1 | 0.75 | 1.2 | 0.94 | 117.6786 |
|  |  |  |  | **Total** | **22702.4** |

**Table 36.0 Third Floor for Lighting Load**

|  |  |
| --- | --- |
| **Summary of Data** | |
|  | **Q** |
| FIRST FLOOR | 19883.60974 |
| SECOND FLOOR | 16958.06618 |
| THIRD FLOOR | 22702.40007 |
| TOTAL | **59544.076 W** |
|

**Table 37.0 Summary of Data for Lighting Load**

1. **MISCELLANEOUS LOAD**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **FIRST FLOOR** | | | | | | | |
| **SPACE** | **Equipment** | **WATTAGE** | **Cs** | **Cl** | **CLF** | **Qs (W)** | **Ql (W)** |
| Maintenance office | CEILING ORBITAL FAN, 70W  SMOKE DETECTOR, 0.8W | 70.8 | 0.33 | 0.16 | 0.96 | 22.42944 | 11.328 |
| Minor operating room | SMOKE DETECTOR, 0.4W CARDIOPULMONARY BYPASS MACHINE, 150 W SURGICAL LGHTS, 25W AUTOCLAVE, 2000W ELECTROSURGERY, 109 W | 2284.4 | 0.33 | 0.16 | 0.96 | 723.6979 | 365.504 |
| Examination/Treament Area | CEILING ORBITAL FAN, 70W   SMOKE DETECTOR, 0.8W | 70.8 | 0.33 | 0.16 | 0.96 | 22.42944 | 11.328 |
| Supply Room | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Pharmacy | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Medical records office | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Philhealth | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Doctors on duty | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Emergency room | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Patho. office | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Radiologist office | TV, 125W TELEPHONE, 5W SMOKE DETECTOR, 1.6W CEILING ORBITAL FAN, 70W | 201.6 | 0.33 | 0.16 | 0.96 | 63.86688 | 32.256 |
| X-ray Room | X-RAY MACHINE, 1500W SMOKE DETECTOR, 0.8W | 1500.8 | 0.33 | 0.16 | 0.96 | 475.4534 | 240.128 |
| OPD Clinic Dental 1 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD Clinic Dental 2 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD Clinic surgery 1 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD Clinic surgery 1 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD Clinic Pedia 1 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD Clinic Pedia 2 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD Clinic Medical 1 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD Clinic Medical 2 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD info and admitting 1 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| OPD ob-gyne | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Cashier | TV, 125W TELEPHONE, 5W CASH REGISTER, 100W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 525.8 | 0.33 | 0.16 | 0.96 | 166.5734 | 84.128 |
| Billing | TV, 125W TELEPHONE, 5W CASH REGISTER, 100W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 525.8 | 0.33 | 0.16 | 0.96 | 166.5734 | 84.128 |
| Admitting | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Administrative Office | TELEPHONE, 5W TV, 125W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 425.8 | 0.33 | 0.16 | 0.96 | 134.8934 | 68.128 |
| Admin Office | TELEPHONE, 5W TV, 125W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 425.8 | 0.33 | 0.16 | 0.96 | 134.8934 | 68.128 |
| Social Welfare | TELEPHONE, 5W TV, 125W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 425.8 | 0.33 | 0.16 | 0.96 | 134.8934 | 68.128 |
| OPD info and admitting 2 | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W  SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Ultrasound | TV, 150W TELEPHONE, 5W ULTRASOUND MACHINE, 95W SMOKE DETECTOR, 0.4W | 250.4 | 0.33 | 0.16 | 0.96 | 79.32672 | 40.064 |
| OPD ob-gyne | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Canteen | TV, 150W TELEPHONE, 5W SMOKE DETECTOR, 1.2W CEILING ORBITAL FAN, 70W EXHAUST FAN, 40W | 266.2 | 0.33 | 0.16 | 0.96 | 84.33216 | 42.592 |
| Dietitians office | TV, 150W TELEPHONE, 5W SMOKE DETECTOR, 0.4W | 155.4 | 0.33 | 0.16 | 0.96 | 49.23072 | 24.864 |
| dry storage | SMOKE DETECTOR, 0.4W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| cold storage | SMOKE DETECTOR, 0.4W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Supply recieving area | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Cadaver Holding Room | SMOKE DETECTOR, 0.4W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Nurse Station | TV, 125 W TELEPHONE, 5 W COMPUTER, 225 W | 355 | 0.33 | 0.16 | 0.96 | 112.464 | 56.8 |
| Hallway | SMOKE DETECTOR, 0.8W SPEAKER, 4W FIRE ALARM, 1 W CCTV(14), 56W | 61.8 | 0.33 | 0.16 | 0.96 | 19.57824 | 9.888 |
| Cooking Area | OVEN, 1200 W REFRIGERATOR, 780W  WATER DISPENSER, 600W | 2580 | 0.33 | 0.16 | 0.96 | 817.344 | 412.8 |
| Staff Dining | SMOKE DETECTOR, 0.4W  FRIDGE, 150W  WATER DISPENSER, 600W | 750.4 | 0.33 | 0.16 | 0.96 | 237.7267 | 120.064 |
|  |  |  |  | **Total** | | **5447.249** | **2751.136** |
|  |  |  |  | **Total Load** | | **8198.3853** | |
| **Table 38.0 Ground Floor for Miscellaneous Load**  **SECOND FLOOR** | | | | | | | |
| **SPACE** | **Equipment** | **Wattage** | **CS** | **Cl** | **CLF** | **Qs (W)** | **Ql (W)** |
| 5- Bed Ward 1 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 5- Bed Ward 2 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 5- Bed Ward 3 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 5- Bed Ward 4 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| Isolation Room | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W  TV, 150 W  WALL FAN,25 W | 5.4 | 0.33 | 0.16 | 0.96 | 1.71072 | 0.864 |
| Private Room 1 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 2 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 3 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 4 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 5 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 6 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 7 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 8 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Isolation Room 2 | SMOKE DETECTOR, 0.4W TELEPHONE, 5W | 5.4 | 0.33 | 0.16 | 0.96 | 1.71072 | 0.864 |
| Chief Nurse | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W  COMPUTER, 225W | 230.4 | 0.33 | 0.16 | 0.96 | 72.99072 | 36.864 |
| Treatment Room | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 70W | 70.4 | 0.33 | 0.16 | 0.96 | 22.30272 | 11.264 |
| Nurse Station | TV, 125 W TELEPHONE, 5 W COMPUTER, 225 W | 355 | 0.33 | 0.16 | 0.96 | 112.464 | 56.8 |
| Reception | SMOKE DETECTOR, 0.4W TELEPHONE, 5W | 5.4 | 0.33 | 0.16 | 0.96 | 1.71072 | 0.864 |
| Chief of Hospital | TELEPHONE, 5W TV, 125W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 425.8 | 0.33 | 0.16 | 0.96 | 134.8934 | 68.128 |
| Conference Room | TELEPHONE, 5W TV, 125W COMPUTER, 225W  WATER DISPENSER, 600 W SMOKE DETECTOR, 0.8 W | 955.8 | 0.33 | 0.16 | 0.96 | 302.7974 | 152.928 |
| Chief of Clinics | TELEPHONE, 5W TV, 125W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 425.8 | 0.33 | 0.16 | 0.96 | 134.8934 | 68.128 |
| 3-Bed Ward 1 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 3-Bed Ward 2 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 3-Bed Ward 3 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 3-Bed Ward 4 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| Delivery Room | SMOKE DETECTOR, 0.4 W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Labor Room | SMOKE DETECTOR, 0.4 W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Pathologic Nursery | SMOKE DETECTOR, 0.4 W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Pre-Mature Nursery | SMOKE DETECTOR, 0.4 W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| BreastFeeding Room | SMOKE DETECTOR, 0.4 W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Pre-operation Area | SMOKE DETECTOR, 0.4W CARDIOPULMONARY BYPASS MACHINE, 150 W SURGICAL LGHTS, 25W AUTOCLAVE, 2000W | 2175.4 | 0.33 | 0.16 | 0.96 | 689.1667 | 348.064 |
| Autoclave Area | AUTOCLAVE, 1400 W SMOKE DETECTOR, 0.4 W | 1400.4 | 0.33 | 0.16 | 0.96 | 443.6467 | 224.064 |
| Sterile Supply Room | TELEPHONE, 15W SMOKE DETECTOR, 0.4 W  FRIDGE, 200 W | 215.4 | 0.33 | 0.16 | 0.96 | 68.23872 | 34.464 |
| Recovery Room | SMOKE DETECTOR, 0.4 W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Lounge Area | SMOKE DETECTOR, 0.4 W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Anesthesia Office | SMOKE DETECTOR 0.4 W TELEPHONE, 5 W COMPUTER, 225 W ANESTHESIA SYSTEM, 166 W | 396.4 | 0.33 | 0.16 | 0.96 | 125.5795 | 63.424 |
| Nurse Station | TV, 125 W TELEPHONE, 5 W COMPUTER, 225 W | 355 | 0.33 | 0.16 | 0.96 | 112.464 | 56.8 |
| Major Operating Room | SMOKE DETECTOR, 0.4 W CARDIOPULMONARY BYPASS MACHINE, 150 W SURGICAL LGHTS, 25W VACUUM SUCTION, 302 W AUTOCLAVE, 2000W | 2477.4 | 0.33 | 0.16 | 0.96 | 784.8403 | 396.384 |
| Clean Up Room | SMOKE DETECTOR, 0.4W | 0.4 | 0.33 | 0.16 | 0.96 | 0.12672 | 0.064 |
| Hallway | SMOKE DETECTOR, 0.8W SPEAKER, 4W FIRE ALARM 1 W CCTV (10), 40 W | 45.8 | 0.33 | 0.16 | 0.96 | 14.50944 | 7.328 |
|  |  |  |  | **Total** | | **3484.825** | **1760.0128** |
|  |  |  |  | **Total Load** | | **5244.8381** | |
| **Table 39.0 Second Floor for Miscellaneous Load**  **THIRD FLOOR** | | | | | | | |
| **SPACE** | **Equipment** | **Wattage** | **Cs** | **Cl** | **CLF** | **Qs (W)** | **Qw (W)** |
| 5- Bed Ward 1 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 5- Bed Ward 2 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 5- Bed Ward 3 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 5- Bed Ward 4 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| Isolation Room | SMOKE DETECTOR, 0.4W TELEPHONE, 5W WALL FAN, 25W TV, 150 W | 175.9 | 0.33 | 0.16 | 0.96 | 55.72512 | 28.144 |
| Private Room 1 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 2 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 3 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 4 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 5 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 6 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 7 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 8 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 9 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 10 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 11 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 12 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 13 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 14 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 15 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Private Room 16 | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W   TV, 150 W  MINIFRIDGE,0.66W | 156.06 | 0.33 | 0.16 | 0.96 | 49.43981 | 24.9696 |
| Chief Nurse | SMOKE DETECTOR, 0.4W  TELEPHONE, 5W  COMPUTER, 225W | 230.4 | 0.33 | 0.16 | 0.96 | 72.99072 | 36.864 |
| Treatment Room | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 70W | 70.4 | 0.33 | 0.16 | 0.96 | 22.30272 | 11.264 |
| Nurse Station | TV, 125 W TELEPHONE, 5 W COMPUTER, 225 W | 355 | 0.33 | 0.16 | 0.96 | 112.464 | 56.8 |
| 3-Bed Ward 1 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| 3-Bed Ward 2 | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| Admitting | TELEPHONE, 5W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 300.8 | 0.33 | 0.16 | 0.96 | 95.29344 | 48.128 |
| Billing | TV, 125W TELEPHONE, 5W CASH REGISTER, 100W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 525.8 | 0.33 | 0.16 | 0.96 | 166.5734 | 84.128 |
| Cashier | TV, 125W TELEPHONE, 5W CASH REGISTER, 100W COMPUTER, 225W CEILING ORBITAL FAN, 70W SMOKE DETECTOR, 0.8W | 525.8 | 0.33 | 0.16 | 0.96 | 166.5734 | 84.128 |
| Personel's Dining | SMOKE DETECTOR, 0.4W  Fridge, 150W  WATER, DISPENSER 600W Oven 1200W | 1950.4 | 0.33 | 0.16 | 0.96 | 617.8867 | 312.064 |
| Chapel | HEAT DETECTOR, 0.16 W CEILING ORBITAL FAN, 50 W | 50.16 | 0.33 | 0.16 | 0.96 | 15.89069 | 8.0256 |
| Solarium | SMOKE DETECTOR, 0.4W CEILING ORBITAL FAN, 25W | 25.4 | 0.33 | 0.16 | 0.96 | 8.04672 | 4.064 |
| Hallway | SMOKE DETECTOR, 0.8W SPEAKER, 4W FIRE ALARM,1W CCTV (10), 40W | 45.8 | 0.33 | 0.16 | 0.96 | 14.50944 | 7.328 |
|  |  |  |  | **Total** | | **2187.574** | **1104.8352** |
|  |  |  |  | **Total Load** | | **3292.4089** | |

**Table 40.0 Third Floor for Miscellaneous Load**

|  |  |  |  |
| --- | --- | --- | --- |
| **Summary of Data** | | | |
|  | **QS** | **QL** | **Q** |
| FIRST FLOOR | 5477.249 | 2751.136 | 8198.3853 |
| SECOND FLOOR | 3484.825 | 1760.0128 | 5244.8381 |
| THIRD FLOOR | 2187.574 | 1104.8352 | 3292.4089 |
| TOTAL | **11149.648** | **5615.984** | **16735.6323** |
|

**Table 41.0 Third Floor for Miscellaneous Load**