

**Building Type** : Mixed use  
**Climate Zone** : Composite  
**Area** : 7333.3 m<sup>2</sup>  
**Conditioned Area**: 5250 m<sup>2</sup>  
**WWR** : 14.7%  
**Occupancy Type** : 24 hours  
**ECBC Compliance**: Prescriptive Method  
(**ECBC 2007**)

#### HVAC

BEE 5 star rated split AC

#### Piping and ductwork

System Description: 20 mm thick Nitrile Rubber  
R value: 1.4, R value of insulation: 0.35,  
Thickness of insulation 13 mm.

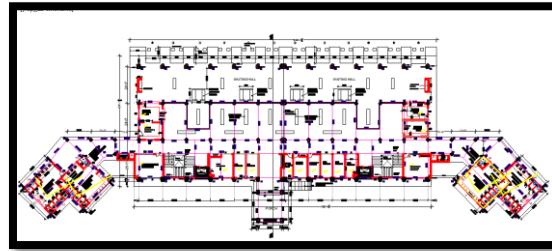
#### Air leakage

Envelope is sealed, caulked, gasket or weather-stripped.

#### Exterior Lighting Details

LED Fixtures with minimum efficacy of 80 lumens/watt.

## 12 Bays Bus Stand, Fatehabad (Haryana)



#### PROJECT SUMMARY

The building is four storied which contains waiting hall, shops, offices, dormitories, waiting rooms and other general facilities. The longer axis of the building is East-West oriented.

#### Building Envelope

**Opaque wall** : 12 mm Plaster + 115 mm bricks + 75mm rock wool + 230 mm bricks + 12 mm Plasters

U-value: 0.399 W/ m<sup>2</sup>K

Assembly thickness : 444 mm:

**Roof Assembly:** 8 mm tiles + 50 mm Cement screed+75 mm XPS insulation + 100mm RCC + 12 mm Cement Plaster

U-value: 0.256 W/ m<sup>2</sup>K

Assembly thickness : 245 mm

**Glazing type 1** DGU( Double Glazed Unit)

U-value: 1.7 W/ m<sup>2</sup>K, SHGC: 0.27, VLT: 38%

**Glazing type** Single Glazed Unit)

U-value: 5.4 W/ m<sup>2</sup>K, SHGC: 0.5, VLT: 29%.

#### Lighting Power Density

##### Space Function Method

Bedroom / Drawing Room: 9 W/ m<sup>2</sup>

Shop/clock room :16 W/ m<sup>2</sup>

Toilets : 8 W/ m<sup>2</sup>

Waiting hall : 4 W/ m<sup>2</sup>

Ticket counter : 14 W/ m<sup>2</sup>

Dormitories : 10 W/ m<sup>2</sup>

**Fixtures** - LED Bulbs

**Occupancy Sensors** - in corridors, toilets, offices and conference rooms

