

**Building Type** : Hospitality Building

**Climate Zone** : Composite

**Area** : 9290.7 m<sup>2</sup>

**Conditioned Area:** 2000 m<sup>2</sup>

**Occupancy Type** : 24 hours

#### WWR

Hostel block : 29.3%

Mess block : 26.7%

**ECBC Compliance:** Prescriptive method  
(ECBC 2007)

#### Lighting Power Density

LPD for dormitory: 9 W/ m<sup>2</sup> as per Building Area method.

LPD for mess :12 W/m<sup>2</sup> as per Building Area method

**Fixtures** :LED Bulbs

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

#### HVAC Specifications

BEE 5 star rated split AC

#### Piping and ductwork

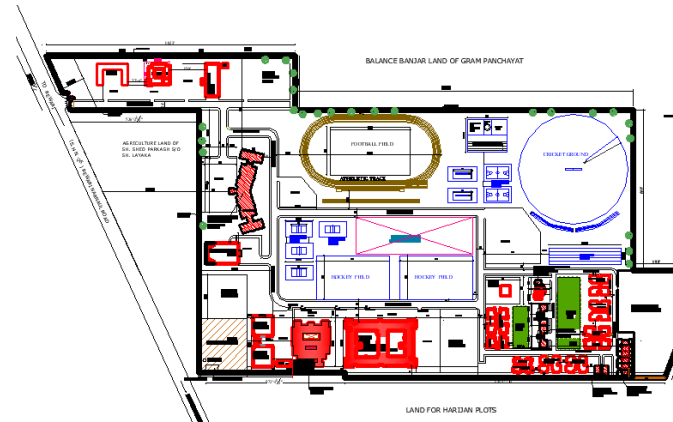
System Description: 20 mm thick Nitrile Rubber pipe, R value of insulation: .38, Thickness of insulation 13 mm.

#### Air Leakage

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

## Sainik School (Hostel and Mess Block), Rewari (Haryana)

### PROJECT SUMMARY



Sainik School building is located in Rewari. The longer axis of the building is in north-south direction. The building is three storied high.

## Building Envelope

**Opaque wall** : 20 mm Plaster + 115 mm AAC blocks + 20 mm air cavity 230 mm AAC blocks + 20 mm Plaster

U-value :0.425 W/m<sup>2</sup>

Assembly thickness : 405 mm:

**Roof Assembly:** 8mm tiles + 50 mm cement screed+75 mm PUFF insulation + 150mm RCC slab + 12 mm Cement plaster

U-value: 0.254 W/ m<sup>2</sup>K

Assembly thickness : 295 mm

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

U-value: 1.87 W/ m<sup>2</sup>K, SHGC: 0.28, VLT: 26%

**Glazing type** DGU( Double Glazed Uni

U-value: 1.88 W/m<sup>2</sup>K, SHGC: 0.32, VLT: 20%

#### Exterior Lighting Details

LE Fixtures with minimum efficacy of 80 lumens/watt.

**ECBC** requirement of 27% hot water through solar water heaters