

**BUILDING TYPE : EDUCATIONAL**

**Climate Zone** : Composite  
**Area** : 6967.7 m<sup>2</sup>  
**Conditioned Area**: 5532.86 m<sup>2</sup>  
**WWR** : 19%  
**Occupancy Type** : Day time use  
**ECBC Compliance** : Prescriptive Approach  
(**ECBC 2017**)

**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: 0.38, Thickness of insulation 13 mm.

**Air leakage**

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

## Govt. Girls College, Dadupur, Karnal



The Govt. Girls Located at Dadupur, Karnal. The building would be two storied, to serving the function of Educational building. The larger axis of the building is towards East-West.

## Building Envelope

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

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

Assembly thickness : 397 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 Unit)

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

**Exterior Lighting Details**

Fixtures with minimum efficacy of 80 lumens/watt.