**عایق XPS**

Material,

XPS, ! Name

Rough, ! Roughness

.02, ! Thickness (m)

.034, ! Conductivity (W/m-K)

35, ! Density (kg/m3)

1400, ! Specific Heat (J/kg-K)

.9, ! Thermal Absorptance

.6, ! Solar Absorptance

.6; ! Visible Absorptance

Cost= (1300000t+13200)A\*1.1

**عایق Eps20**

Material,

EPS20, ! Name

Rough, ! Roughness

.02, ! Thickness (m)

.035, ! Conductivity (W/m-K)

20, ! Density (kg/m3)

1400, ! Specific Heat (J/kg-K)

.9, ! Thermal Absorptance

.6, ! Solar Absorptance

.6; ! Visible Absorptance

Cost= (1100000t+13200)A\*1.1

**عایق Eps8**

Material,

EPS8, ! Name

Rough, ! Roughness

.02, ! Thickness (m)

.035, ! Conductivity (W/m-K)

8, ! Density (kg/m3)

1400, ! Specific Heat (J/kg-K)

.9, ! Thermal Absorptance

.6, ! Solar Absorptance

.6; ! Visible Absorptance

Cost= (300000t+13200)A\*1.1

**عایق Rock-wool-100**

Material,

Rock-wool-100, ! Name

Rough, ! Roughness

.03, ! Thickness (m)

.033, ! Conductivity (W/m-K)

100, ! Density (kg/m3)

710, ! Specific Heat (J/kg-K)

.9, ! Thermal Absorptance

.6, ! Solar Absorptance

.6; ! Visible Absorptance

Cost= (680000t+ 15192)A\*1.1

**عایق Rock-wool-80**

Material,

Rock-wool-80, ! Name

Rough, ! Roughness

.03, ! Thickness (m)

.033, ! Conductivity (W/m-K)

80, ! Density (kg/m3)

710, ! Specific Heat (J/kg-K)

.9, ! Thermal Absorptance

.6, ! Solar Absorptance

.6; ! Visible Absorptance

Cost= (602480t +12466)A\*1.1

هرجا گچ بود هزینه اش میشه:

Cost= 25000A

**PVC**

Material,

PVC, ! Name

Rough, ! Roughness

.008, ! Thickness (m)

.016, ! Conductivity (W/m-K)

1379, ! Density (kg/m3)

1004, ! Specific Heat (J/kg-K)

.9, ! Thermal Absorptance

.6, ! Solar Absorptance

.6; ! Visible Absorptance

Cost=80000A

**کاشی**

Material,

11\_1\_5169, ! Name

Rough, ! Roughness

.02, ! Thickness (m)

0.8, ! Conductivity (W/m-K)

1700, ! Density (kg/m3)

850, ! Specific Heat (J/kg-K)

0.9, ! Thermal Absorptance

0.6, ! Solar Absorptance

0.6; ! Visible Absorptance

Cost= 67365A

**پارکت چوبی**

Material,

Timber-flooring, ! Name

Rough, ! Roughness

.01, ! Thickness (m)

0.14, ! Conductivity (W/m-K)

1200, ! Density (kg/m3)

650, ! Specific Heat (J/kg-K)

0.9, ! Thermal Absorptance

0.78, ! Solar Absorptance

0.78; ! Visible Absorptance

Cost= 100000A

**فوم زیر پارکت**

Material,

Foam , ! Name

Rough, ! Roughness

.002, ! Thickness (m)

0.06, ! Conductivity (W/m-K)

70, ! Density (kg/m3)

1500, ! Specific Heat (J/kg-K)

0.9, ! Thermal Absorptance

0.7, ! Solar Absorptance

0.7; ! Visible Absorptance

**سیمان با ضخامت 1 سانت**

Material, 3\_1\_5135,

Rough,

.01,

0.72,

1860,

840,

0.9,

0.6,

0.6;

**گچ با ضخامت 0.5 سانت**

Material, 1\_6\_67,

Rough,

.005,

0.4,

1000,

1000,

0.9,

0.5,

0.5;

سیمان با ضخامت 2 سانت 3\_1\_5134

ایزوگام 1\_1\_10003

**برای کف ها**

**طبقه دوم**

حال

Material:NoMass, 35\_RVAL\_2,

Rough,

.0428,

0.9,

0.7,

0.7;

Material:NoMass, 35\_RVAL\_4,

Rough,

.05384,

0.9,

0.7,

0.7;

Construction, 35,

1\_6\_66,

35\_RVAL\_2,

1\_4\_5128,

35\_RVAL\_4,

3\_1\_5134,

عایق

3\_1\_5135,

11\_1\_5169,

35\_7\_88;

Material:NoMass, 36\_RVAL\_4,

Rough,

.05384,

0.9,

0.7,

0.7;

Material:NoMass, 36\_RVAL\_6,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 36,

35\_7\_88,

11\_1\_5169,

3\_1\_5135,

عایق

3\_1\_5134,

36\_RVAL\_4,

1\_4\_5128,

36\_RVAL\_6,

1\_6\_66;

Construction, 35,

1\_6\_66,

35\_RVAL\_2,

1\_4\_5128,

35\_RVAL\_4,

3\_1\_5134,

عایق

3\_1\_5135,

Timber-flooring,

35\_7\_88;

Construction, 36,

35\_7\_88,

Timber-flooring,

3\_1\_5135,

عایق

3\_1\_5134,

36\_RVAL\_4,

1\_4\_5128,

36\_RVAL\_6,

1\_6\_66;

Construction, 35,

1\_6\_66,

35\_RVAL\_2,

1\_4\_5128,

35\_RVAL\_4,

3\_1\_5134,

Foam,

Timber-flooring,

35\_7\_88;

Construction, 36,

35\_7\_88,

Timber-flooring,

Foam,

3\_1\_5134,

36\_RVAL\_4,

1\_4\_5128,

36\_RVAL\_6,

1\_6\_66;

آشپزخانه

طبقه دوم

Material:NoMass, 39\_RVAL\_2,

Rough,

.0428,

0.9,

0.7,

0.7;

Material:NoMass, 39\_RVAL\_4,

Rough,

.05384,

0.9,

0.7,

0.7;

Construction, 39,

1\_6\_66,

39\_RVAL\_2,

1\_4\_5128,

39\_RVAL\_4,

21\_5\_5134,

1\_1\_10003,

3\_1\_5134,

عایق

3\_1\_5135,

11\_1\_5169;

Material:NoMass, 40\_RVAL\_5,

Rough,

.05384,

0.9,

0.7,

0.7;

Material:NoMass, 40\_RVAL\_7,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 40,

11\_1\_5169,

3\_1\_5135,

عایق

3\_1\_5134,

1\_1\_10003,

21\_5\_5134,

40\_RVAL\_5,

1\_4\_5128,

40\_RVAL\_7,

1\_6\_66;

**دو اتاق**

**طبقه دوم**

Material:NoMass, 41\_RVAL\_2,

Rough,

.0428,

0.9,

0.7,

0.7;

Material:NoMass, 41\_RVAL\_4,

Rough,

.05384,

0.9,

0.7,

0.7;

Construction, 41,

1\_6\_66,

41\_RVAL\_2,

1\_4\_5128,

41\_RVAL\_4,

3\_1\_5134,

عایق

3\_1\_5134,

Timber-flooring,

41\_6\_197;

Material:NoMass, 42\_RVAL\_3,

Rough,

.05384,

0.9,

0.7,

0.7;

Material:NoMass, 42\_RVAL\_5,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 42,

41\_6\_197,

Timber-flooring,

3\_1\_5134,

عایق

3\_1\_5134,

42\_RVAL\_3,

1\_4\_5128,

42\_RVAL\_5,

1\_6\_66;

Construction, 41,

1\_6\_66,

41\_RVAL\_2,

1\_4\_5128,

41\_RVAL\_4,

3\_1\_5134,

Foam,

Timber-flooring,

41\_6\_197;

Construction, 42,

41\_6\_197,

Timber-flooring,

Foam,

3\_1\_5134,

42\_RVAL\_3,

1\_4\_5128,

42\_RVAL\_5,

1\_6\_66;

Construction, 41,

1\_6\_66,

41\_RVAL\_2,

1\_4\_5128,

41\_RVAL\_4,

3\_1\_5134,

عایق

3\_1\_5135,

11\_1\_5169,

41\_6\_197;

Construction, 42,

41\_6\_197,

11\_1\_5169,

3\_1\_5135,

عایق

3\_1\_5134,

42\_RVAL\_3,

1\_4\_5128,

42\_RVAL\_5,

1\_6\_66;

**کف دو اتاق طبقه اول**

Construction, 43,

17\_1\_5,

17\_2\_103,

17\_3\_11,

17\_4\_66;

عایق

3\_1\_5134,

Timber-flooring,

Construction, 44,

Timber-flooring,

3\_1\_5134,

عایق

17\_4\_66,

17\_3\_11,

17\_2\_103,

17\_1\_5;

Construction, 43,

17\_1\_5,

17\_2\_103,

17\_3\_11,

17\_4\_66;

Foam,

Timber-flooring,

Construction, 44,

Timber-flooring,

Foam,

17\_4\_66,

17\_3\_11,

17\_2\_103,

17\_1\_5;

Construction, 43,

17\_1\_5,

17\_2\_103,

17\_3\_11,

17\_4\_66;

عایق

3\_1\_5135,

11\_1\_5169,

Construction, 44,

11\_1\_5169,

3\_1\_5134,

عایق

17\_4\_66,

17\_3\_11,

17\_2\_103,

17\_1\_5;

**برای دیوارها**

دیوار آشپزخانه به سمت راه پله

Material:NoMass, 11\_RVAL\_4,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 11,

11\_1\_5169,

3\_1\_5135,

عایق

3\_1\_5134,

3\_2\_5128,

11\_RVAL\_4,

1\_6\_66;

Material:NoMass, 12\_RVAL\_2,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 12,

1\_6\_66,

12\_RVAL\_2,

3\_2\_5128,

3\_1\_5134,

عایق

3\_1\_5135,

11\_1\_5169;

دیوار حال به کوچه\_ دیوار اتاق ها به حیاط

Material:NoMass, 25\_RVAL\_4,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 25,

25\_1\_56, مرمر

3\_1\_5134, سیمان

3\_2\_5128, آجر

25\_RVAL\_4, گچ و خاک

1\_6\_66

عایق

1\_6\_67;

Construction, 25,

25\_1\_56, مرمر

3\_1\_5134, سیمان

3\_2\_5128, آجر

25\_RVAL\_4, گچ و خاک

1\_6\_66; گچ

عایق

PVC;

Construction, 25,

25\_1\_56, مرمر

3\_1\_5134, سیمان

3\_2\_5128, آجر

25\_RVAL\_4, گچ و خاک

1\_6\_66; گچ

PVC;

Material:NoMass, 26\_RVAL\_2,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 26,

1\_6\_66,

26\_RVAL\_2,

3\_2\_5128,

3\_1\_5134,

25\_1\_56;

دیوار حال به همسایه\_دیوار اتاق ها به همسایه

Material:NoMass, 3\_RVAL\_3,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 3,

3\_1\_5134,

3\_2\_5128,

3\_RVAL\_3,

1\_6\_66

PVC;

Construction, 3,

3\_1\_5134,

3\_2\_5128,

3\_RVAL\_3,

1\_6\_66

عایق

PVC;

Construction, 3,

3\_1\_5134,

3\_2\_5128,

3\_RVAL\_3,

1\_6\_66

عایق

1\_6\_67;

Material:NoMass, 4\_RVAL\_2,

Rough,

.0428,

0.9,

0.7,

0.7;

Construction, 4,

1\_6\_66,

4\_RVAL\_2,

3\_2\_5128,

3\_1\_5134;

دیوار آشپزخانه به همسایه

Construction, 23,

3\_1\_5134,

3\_2\_5128,

3\_1\_5134,

عایق

3\_1\_5135,

11\_1\_5169;

Construction, 24,

11\_1\_5169,

3\_1\_5134,

3\_2\_5128,

3\_1\_5134;

دیوار آشپزخانه به کوچه

Construction, 37,

25\_1\_56,

3\_1\_5134,

3\_2\_5128,

3\_1\_5134,

عایق

3\_1\_5135,

11\_1\_5169;

Construction, 38,

11\_1\_5169,

3\_1\_5134,

3\_2\_5128,

3\_1\_5134,

25\_1\_56;

Cost=