

Fig. S1. Mean temperature and humidity in different months of the year in Ardabil, (Climate Consultant 6.0 Software)

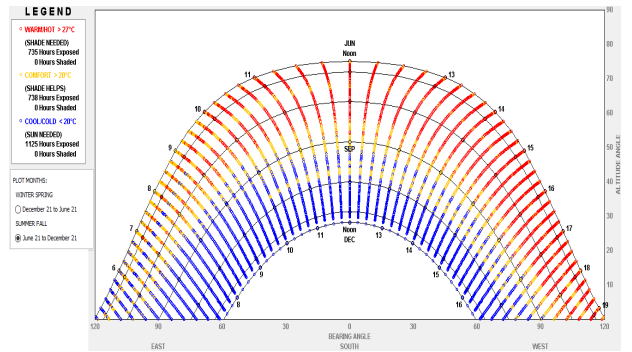
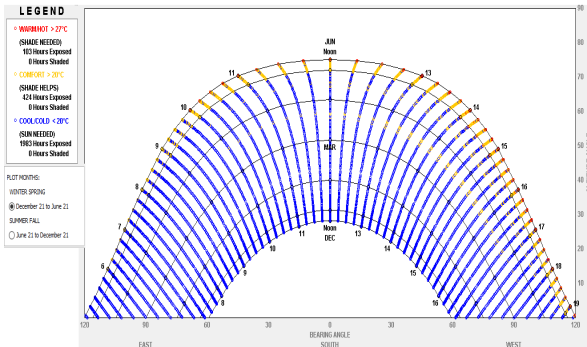
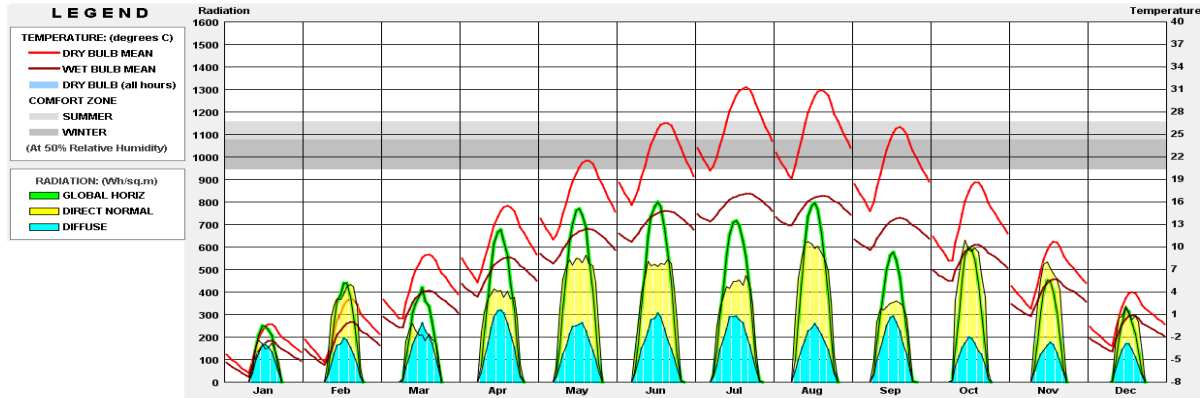


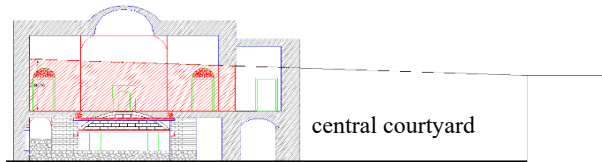
Fig. S2. Shading and sunshine during summer and fall in Ardabil, (Climate Consultant 6.0 Software)



**Fig. S3.** Shading and sunshine during winter and spring in Ardabil, (Climate Consultant 6.0 Software)



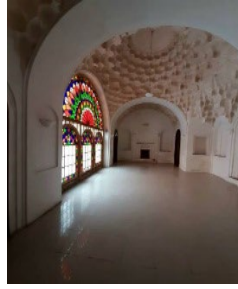
**Fig. S4.** Monthly averages of scattered, horizontal, and direct sunshine compared with monthly temperatures in Ardabil, (Climate Consultant 6.0 Software)



**Fig. S5.** The penetration of winter sunlight into the indoor spaces without obstacles; Ershadi Traditional House, Ardabil<sup>25</sup>



**Fig. S6.** Pictures of Ebrahimi Traditional House



**Fig. S7.** Pictures of Ershadi Traditional House Fig