

SITE ANALYSIS

For House Design owned by Mr.
Elan

249 Flintlock dr. York, South
Carolina 29745



Site Location

- 249 Flintlock dr. York, South Carolina 29745
- North: Grist Branch
- South: Islamville Way
- West: Islamville Way
- East: Grist Branch
- Total area: 700,302 feet square ~ 16.07 acre

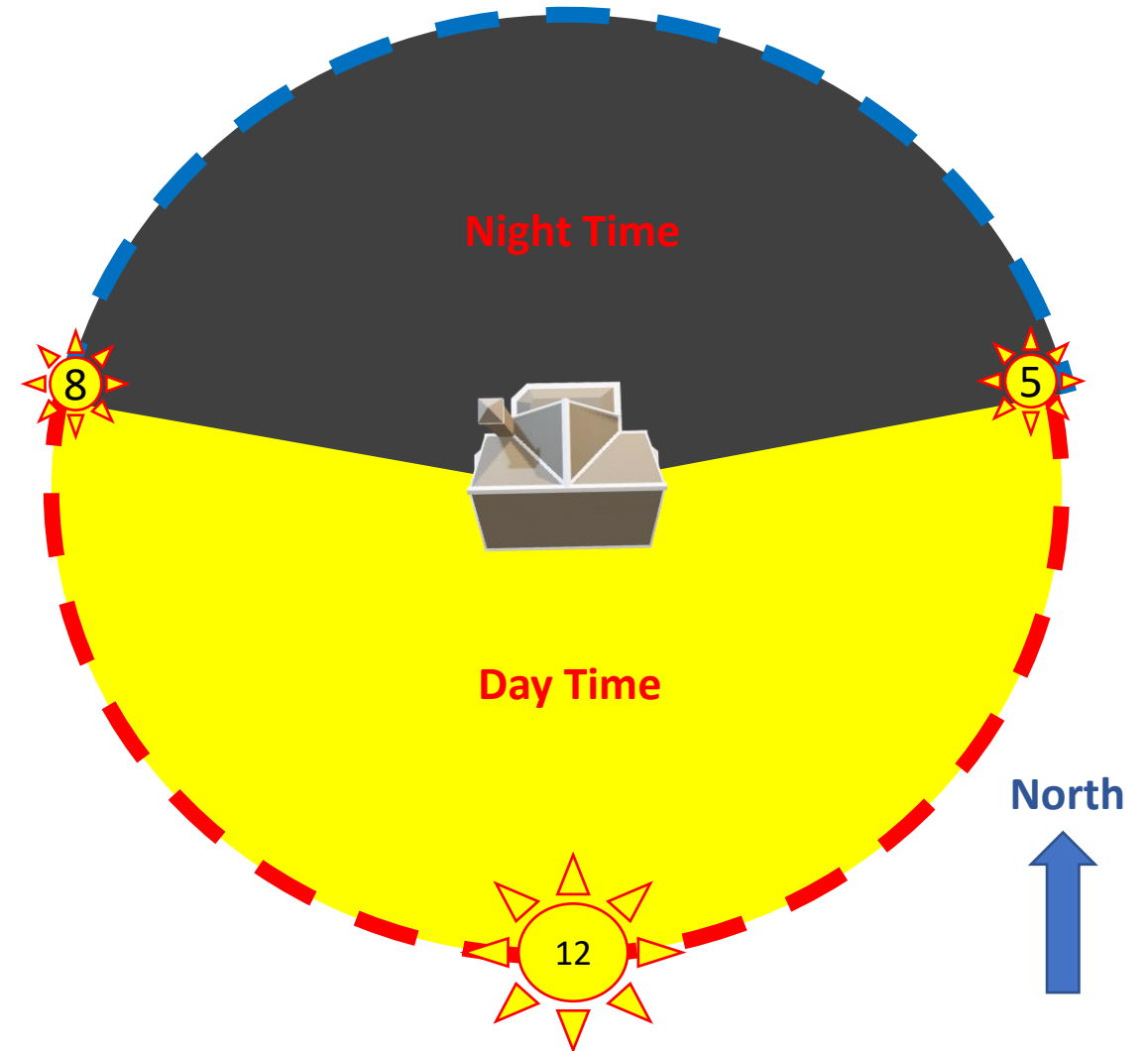


Site Climate

- Climate: Humid subtropical climate
- Cfa: Temperate, without dry season, hot summer.
- With the coldest month averaging above 0 °C (32 °F), at least one month's average temperature above 22 °C (71.6 °F), and at least four months averaging above 10 °C (50 °F).
- No significant precipitation difference between seasons. No dry months in the summer.

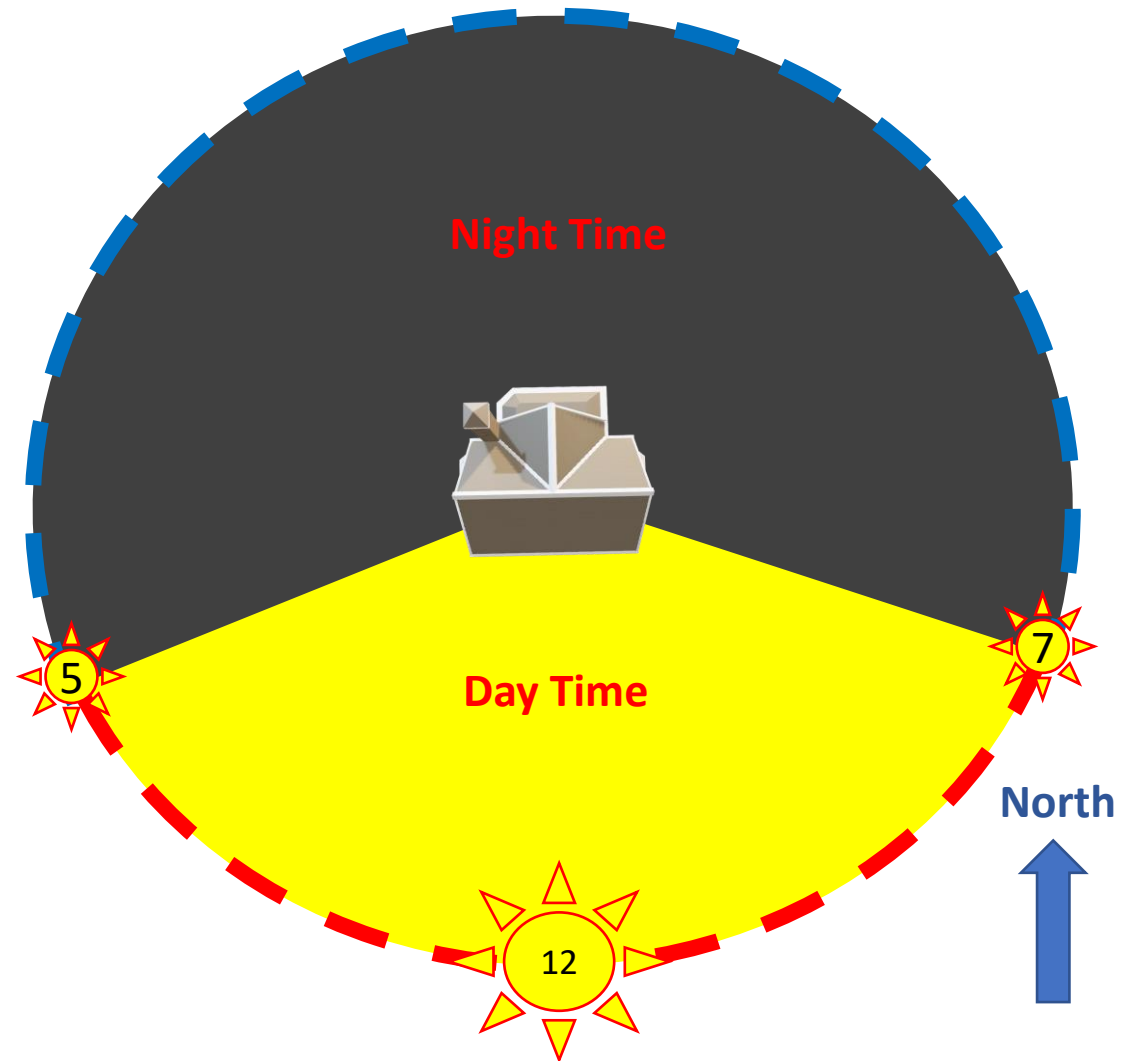
Sunlight Analysis - Midsummer

- Sunrise at 5.12 a.m (sun azimuth 60°)
- Noon at 12.27 p.m (sun azimuth 181°)
(sun altitude 78°)
- Sunset at 7.43 p.m (sun azimuth 300°)
- **Analysis: To negate the heat coming from the sun during the summer, the opening should be minimal facing south**



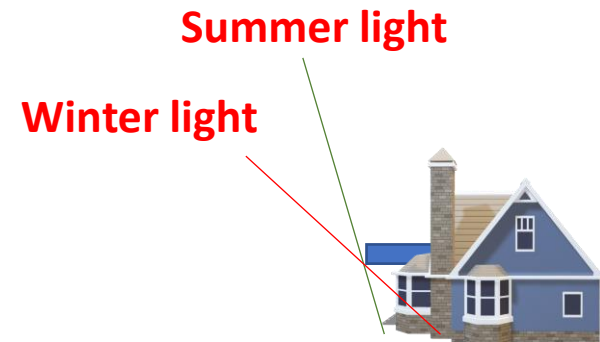
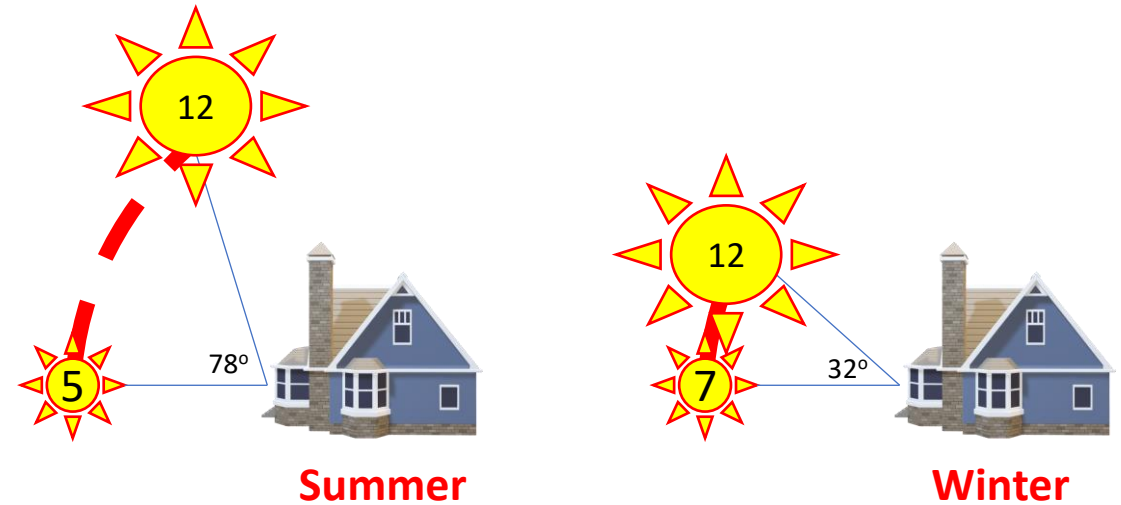
Sunlight Analysis - Midwinter

- Sunrise at 7.31 a.m (sun azimuth 119°)
- Noon at 12.25 p.m (sun azimuth 180°)
(sun altitude 32°)
- Sunset at 5.18 p.m (sun azimuth 242°)
- **Analysis:** To get the highest heat possible, the opening should be placed on the south side of the house



Sunlight Altitude Analysis

- Midwinter: Noon at 12.25 p.m (sun azimuth 180°) (sun altitude 32°)
- Midsummer: Noon at 12.27 p.m (sun azimuth 181°) (sun altitude 78°)
- The difference in sun altitude can be used to negate sunlight during summer and allow sunlight in during winter
- **Analysis: We can use appropriate overhang as a barrier for the house facing the South side**



Site Topography

- Elevation: 215 meter to 194 meter
- 4-meter increment
- Slope 6° to 3.1°
- **Analysis: View potential through high slope at the north west up to north east**
- **Full opening can be place on the north side of the building as after the sunlight analysis, no sunlight will be coming from the north side**

