# CABLES
## DESIGN COMPARISON

# CABLE DESIGN COMPARISON

## LOW BIAS SYSTEM

The cables in the Low Bias Cable System form a diamond shaped pattern on all four sides of the air supported building so that a significant portion of the dome's structural load is carried by the exterior cable system versus the fabric, itself.

**CODE COMPLIANCE**
Meets IBC Codes; 20 times the minimum safety factor required by code.

**WIND DESIGN** - 160 MPH
**SNOW LOAD** - 25 psf

**STRUCTURE TYPE**
Seasonal or Permanent Applications

**DESIGN SHAPE**
Diamond crossing pattern that offers both radial and lateral support.

## FULL CABLE GRID

The geodesic cable pattern of this dome carries most of the domes structural load. Extreme wind loads are evenly transferred by the cable system to the dome anchorage and foundation. This ensures that only a small portion of the dome's structural load is carried by the dome's fabric (about 15 lbs PSI fabric load).

**CODE COMPLIANCE**
Meets IBC Codes; 50 times the minimum safety factor required by code.

**WIND DESIGN** - 180 MPH
**SNOW LOAD** - 50 psf

**STRUCTURE TYPE**
Seasonal or Permanent Applications

**DESIGN SHAPE**
Geodesic pattern that provides the highest level of fabric stress relief.

## RADIAL CABLE SYSTEM

The radial cable design has the widest cable spacing of the three designs. Since this design has minimal cabling, it is generally used for seasonal air structures to reduce the work involved in the annual removal of the dome from its site. The radial cable system keeps the fabric envelope in place, but the entire structural load that is placed on the dome is carried by the fabric envelope.

**CODE COMPLIANCE**
Meets IBC Codes; 4 times the minimum safety factor required by code.

**WIND DESIGN** - 140 MPH
**SNOW LOAD** - 5-7 psf

**STRUCTURE TYPE**
Seasonal Applications

**DESIGN SHAPE**
Tenioned cables in one direction across the barrel of the building

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