



ASU SkySong, Phoenix Arizona

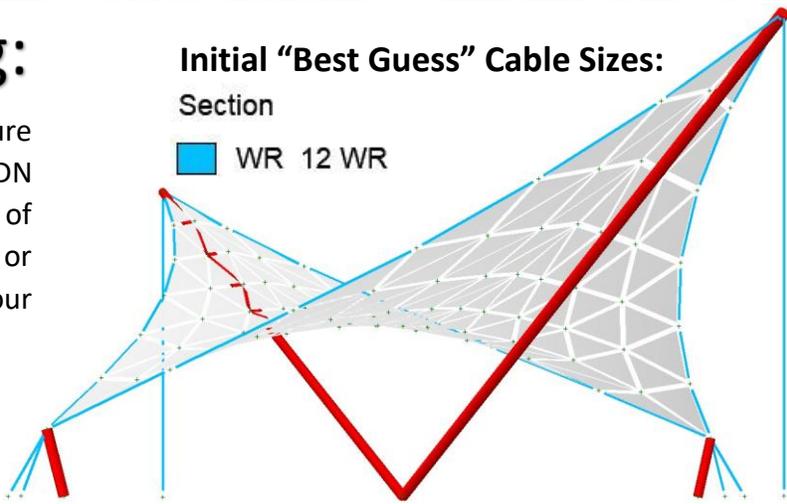
Automatic Member Sizing:

This feature allows you to build and analyze your structure using some initial "best guess" member sizes. From there, NDN will review the results, checks those results against any one of the building codes contained in NDN (US, UE, Australian, or British) and recommend member sizes that allow your structure to operate at peak efficiency.

Initial "Best Guess" Cable Sizes:

Section

WR 12 WR



Member Design:

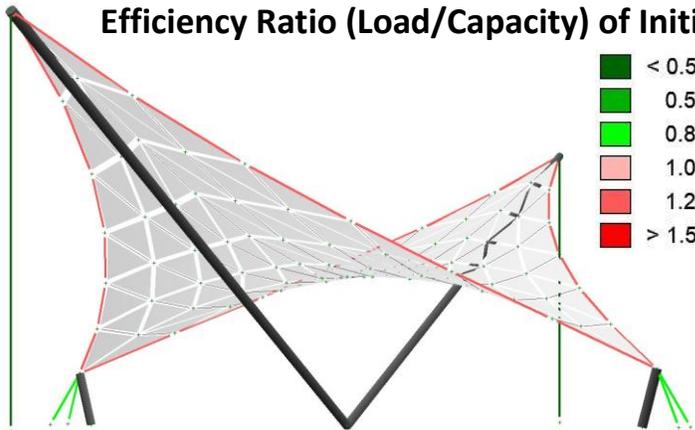
Once you've run your analysis, it's inside the Member Designer where you can play with "Trial Sizes". This allows you to see how each of your member types (beams, cables, struts, etc.) hold up against the analysis without having to change the properties and rerun the analysis each time. You can also have NDN size these members for you to insure the structure is built to peak efficiency (an efficiency ratio of 0.8 to 1.01). This way, you'll know you are building a structure that is safe, without wasting money on overbuilt components.

Building Code

- Australian
- British
- Euro
- USA

Efficiency Ratio (Load/Capacity) of Initial Trial Sizes

- < 0.50
- 0.50 - 0.80
- 0.80 - 1.01 (Best)
- 1.01 - 1.20
- 1.20 - 1.50
- > 1.50



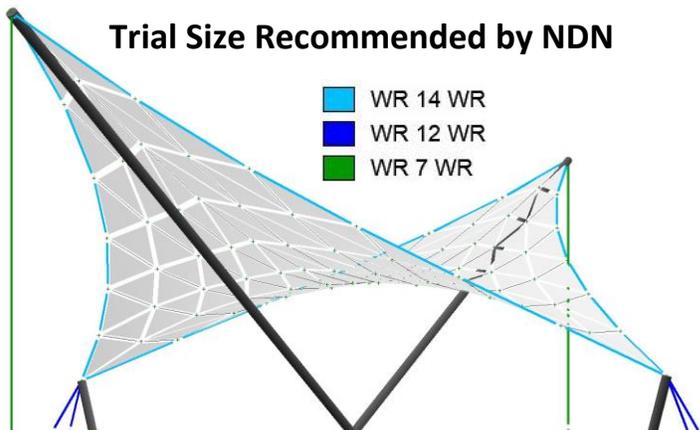
Left: We can see that our initial "best guess" section sizes are not all currently in the peak efficiency range.

Lower Left: Section sizes we get when we have NDN size the members for us. These are the recommended Trial Sizes.

Lower Right: Checking the recommended section sizes against the analysis cases reveals that all cable assemblies are now operating at peak efficiency.

Trial Size Recommended by NDN

- WR 14 WR
- WR 12 WR
- WR 7 WR



Efficiency Ratio – Recommended Sizes

- < 0.50
- 0.50 - 0.80
- 0.80 - 1.01 (Best)
- 1.01 - 1.20
- 1.20 - 1.50
- > 1.50

