

A New Interactive Web-based Tool to Evaluate The Efficiency of Solar Protection Devices

Ying-Chieh Chan

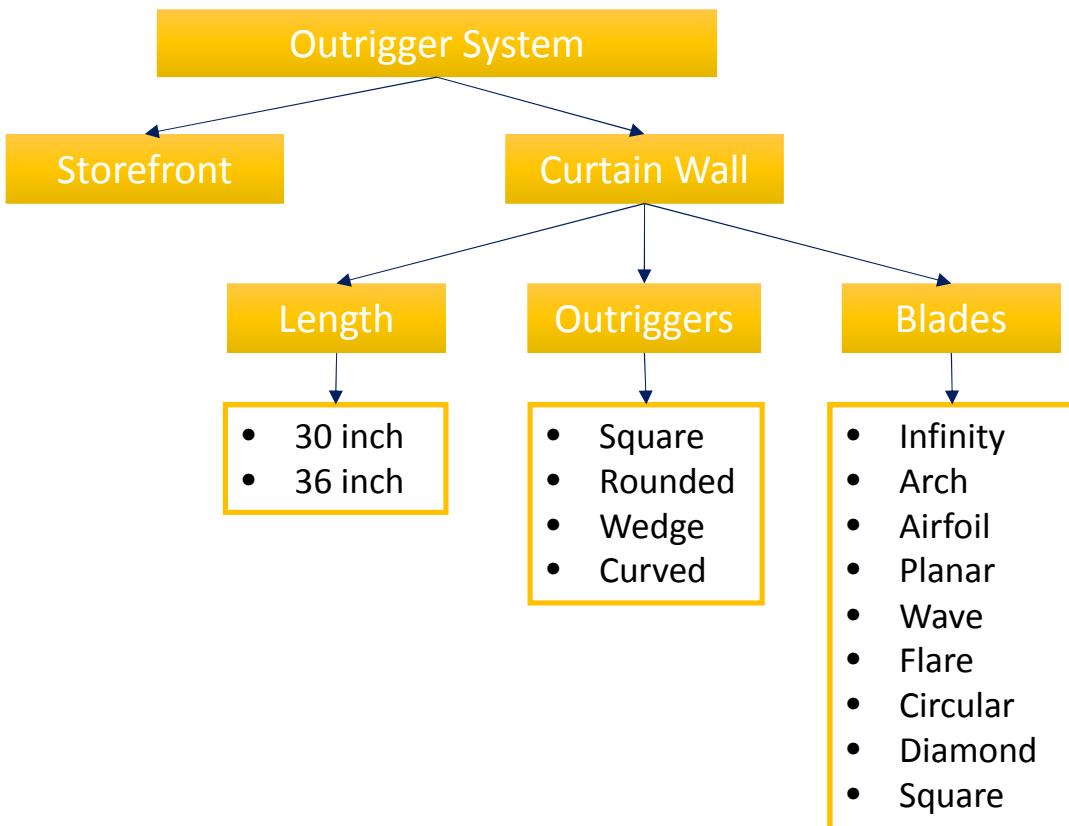
Iason Konstantzos

Athanasis Tzempelikos

Matthew Miller

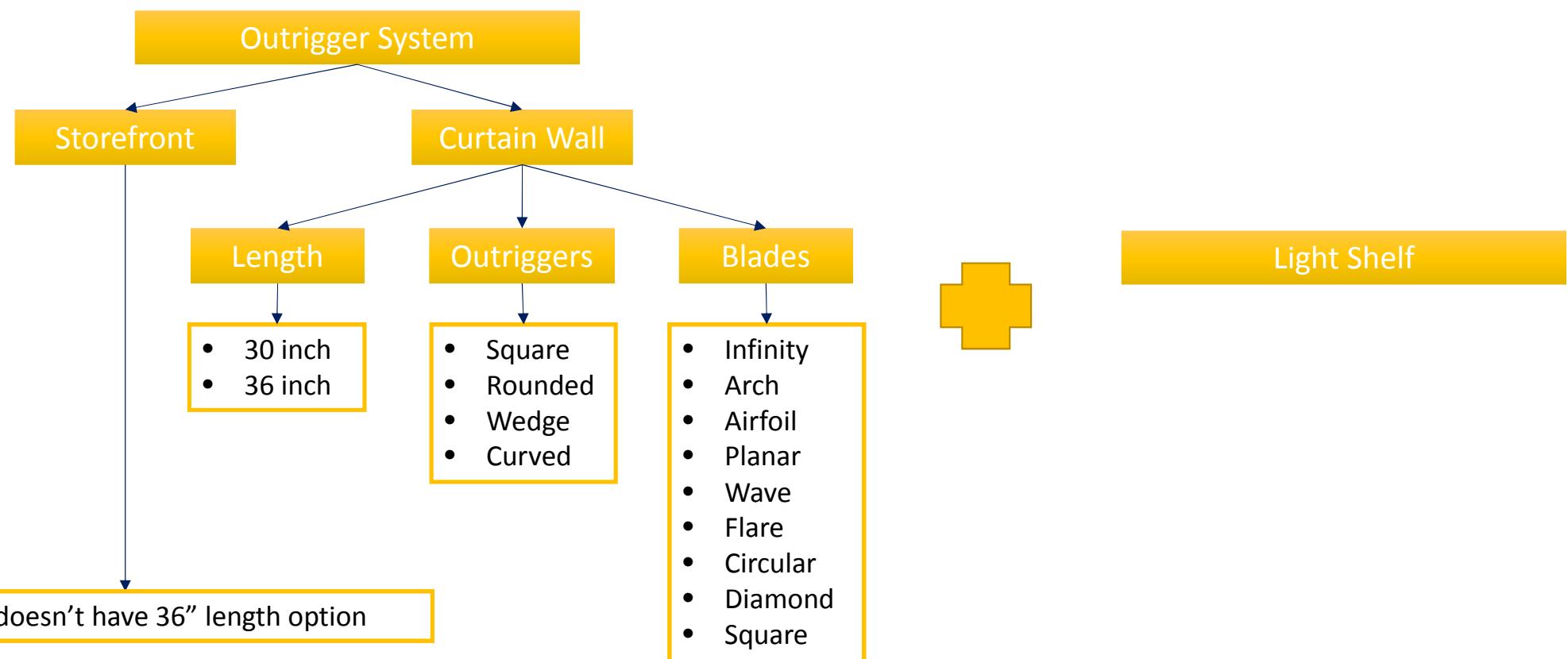
Objectives

Solar Protection Devices

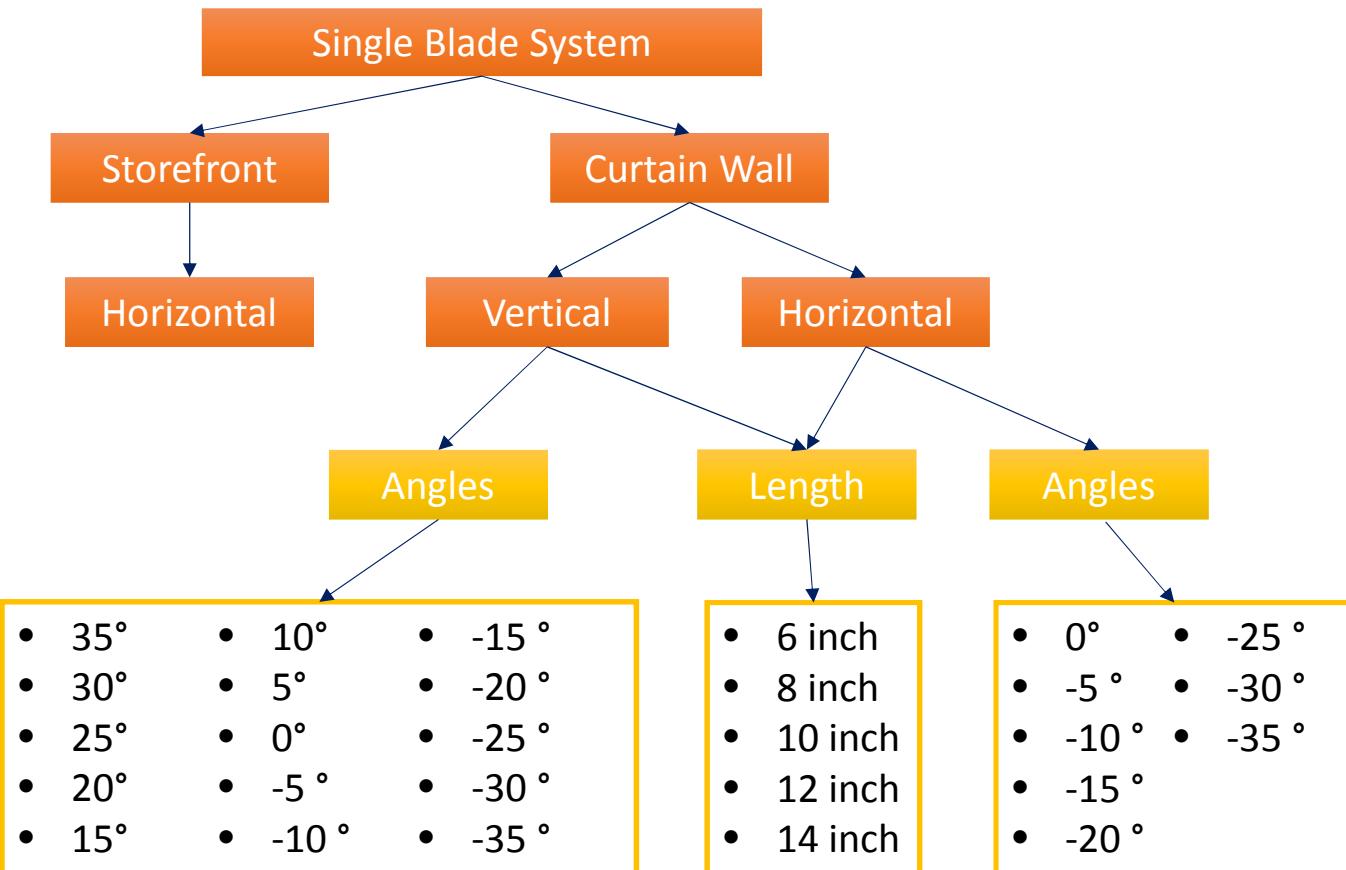


STANDARD OUTRIGGERS	STANDARD FASCIAS	STANDARD BLADES
 30° SQUARE	RECTANGULAR	 INFINITY  FLARE
 36° SQUARE		 ARCH  CIRCULAR
 30° ROUNDED	BULLNOSE	 AIRFOIL  DIAMOND
 36° ROUNDED		 PLANAR  SQUARE
 30° WEDGE	ANGULAR	 WAVE  CIRCULAR
 36° WEDGE		
 30° CURVED	CIRCULAR	 CIRCULAR  SQUARE
 36° CURVED		 DIAMOND

Solar Protection Devices



Solar Protection Devices



Unit System: SI unit

Location: State/Province: ---USA--- City:

Room Dimensions and Orientation:

Façade Orientation: South Room Height: m

Room Fenestration Width: m Room Depth: m

Glazing Properties:

Glazing System SHGC: 0.50 Glazing System U-factor: 1.70 W/m²K

Glazing System VT: 0.50

Scenario 1

Shading Type: Outrigger System
Façade Framing: Curtain Wall
Frame Type: 1600 SS
Vision Area: Glass Percentage
Glass Percentage: 0.95

With Lightsheff?

Space Above: cm

Window Height: cm

Outrigger Length: 76.2cm
Outrigger Type: Square
Blade Type: Infinity

Scenario 2

Shading Type: Outrigger System
Façade Framing: Curtain Wall
Frame Type: 1600 SS
Vision Area: Glass Percentage
Glass Percentage: 0.95

With Lightsheff?

Space Above: cm

Window Height: cm

Outrigger Length: 76.2cm
Outrigger Type: Square
Blade Type: Infinity

Calculations will take about 10-15 seconds to run - scroll down to see results