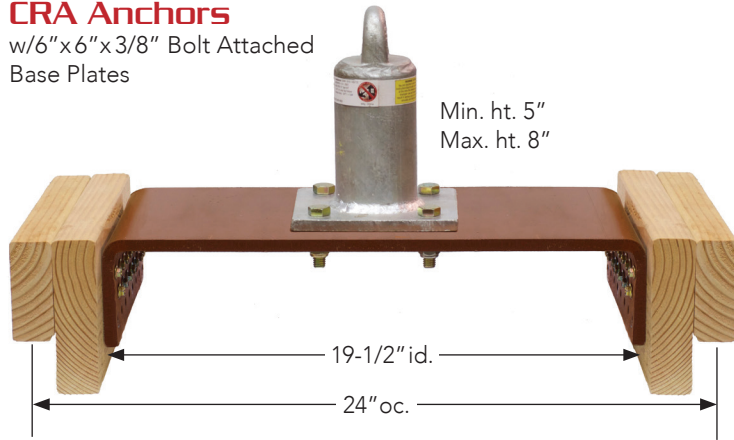


# Cross-Brace HLL System

CBO HLL systems are specified for installation onto wood framed top chords or trusses using CRA anchors with 6" x 6" bolt attached base plates. Use with SAS supplied rigging accessories for single person PPE anchor or HLL systems.

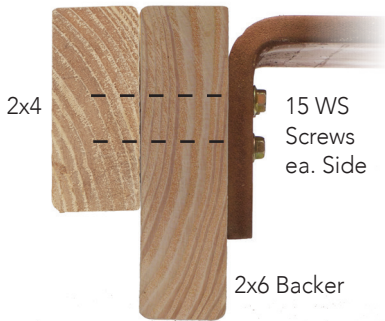
## CRA Anchors

w/6" x 6" x 3/8" Bolt Attached Base Plates



Min. ht. 5"  
Max. ht. 8"

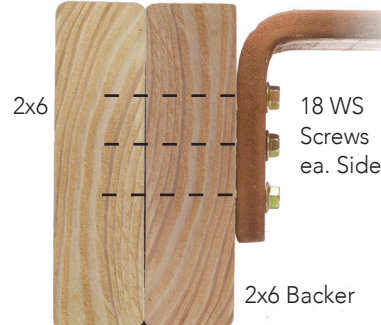
## 2x4 Top Chords



15 WS  
Screws  
ea. Side

2x6 Backer

## 2x6 Top Chords



18 WS  
Screws  
ea. Side

2x6 Backer

## Compliance/Certification

SAS anchors and accessory components are 3rd party certified to comply with current ANSI and OSHA standards.

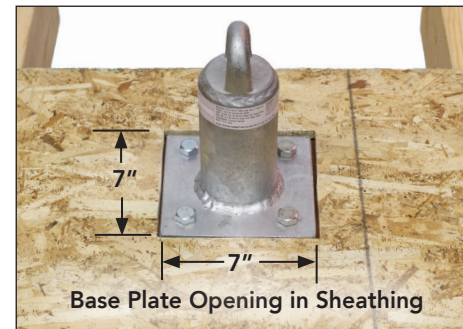
- CRA/CRO Intertek Lab Reports
- Engineering by DH Glabe & Assoc.

Reports available on request.

## Roof Framing Specifications

2x4 and 2x6 top chords must be spaced 24" oc. and require 2x6 backing. The structure must be fully sheathed prior to use for fall protection. The project architect, engineer or 3rd party engineer is required to specify the structural framing for the intended fall protection load.

Min. 7/16" OSB



Base Plate Opening in Sheathing

## CBO HLL Standard Rigging Specifications

### Fastener Specifications

- No.2084-3.5 3-1/2" WS Screws
- 2x4 top chords 15 ea side (30 total)
- 2x6 top chords 18 ea side (36 total)

### Standard Rigging Specifications

- **Max. HLL Length (Run):** 240ft
- **Max. Anchor Spacing (Leg):** 30ft
- **"A" and "B" ends:** Loop top or 4-Way anchor.
- **Intermediate Anchor:** Pass-Thru or 4-Way anchor
- **"A" end:** Couplers + turnbuckle + 1 spring E/A
- **"B" end:** Cable termination

### Alternate Rigging

Turnbuckles and spring E/A's may be attached to opposite end of a HLL length using special application couplers.

### User Specifications

- **Fall Arrest:** Max.2 persons per HLL run w/max.1 person per leg
- **Fall Restraint:** 4 persons per HLL run w/max. 2 persons per leg
- Personal energy absorber required for each person

### Cable Terminations

- Field swage both ends of HLL length
  - a) Cable clamps
  - b) Optional 8001-CFS on-site hyd. crimper system
  - c) One end factory swaged

### HLL Cable

- Cut to length +5ft as measured from roof plan and verified by field measure
- Bulk cable cut to length on site