

FALL PROTECTION STEEL ERECTION



- **STEEL ERECTION
FATALITIES 3 YEAR
PERIOD (142)**
- **83 FALLS**
- **25 HIT BY OBJECT**
- **12 ELECTROCUTION**
- **6 X-MAS TREE**
- **10 COLLAPSE STEEL**
- **6 LACK OF RAILING**

STEEL ERECTION MOST COMMON VIOLATIONS

**NO PROTECTION FOR
CONNECTOR/BOLTER/DECKER**

WORKERS DON'T WANT PFAS

CHRISTMAS TREE LIFTING

NO TAGLINES

SINGLE BOLT METHOD USED



TYPICAL STRUCTURAL STEEL JOB



**Columns, beams, open web joists, purlins, decking
stair way access, bridging between joists.**

Minimum 2 Bolt or 10% Connections

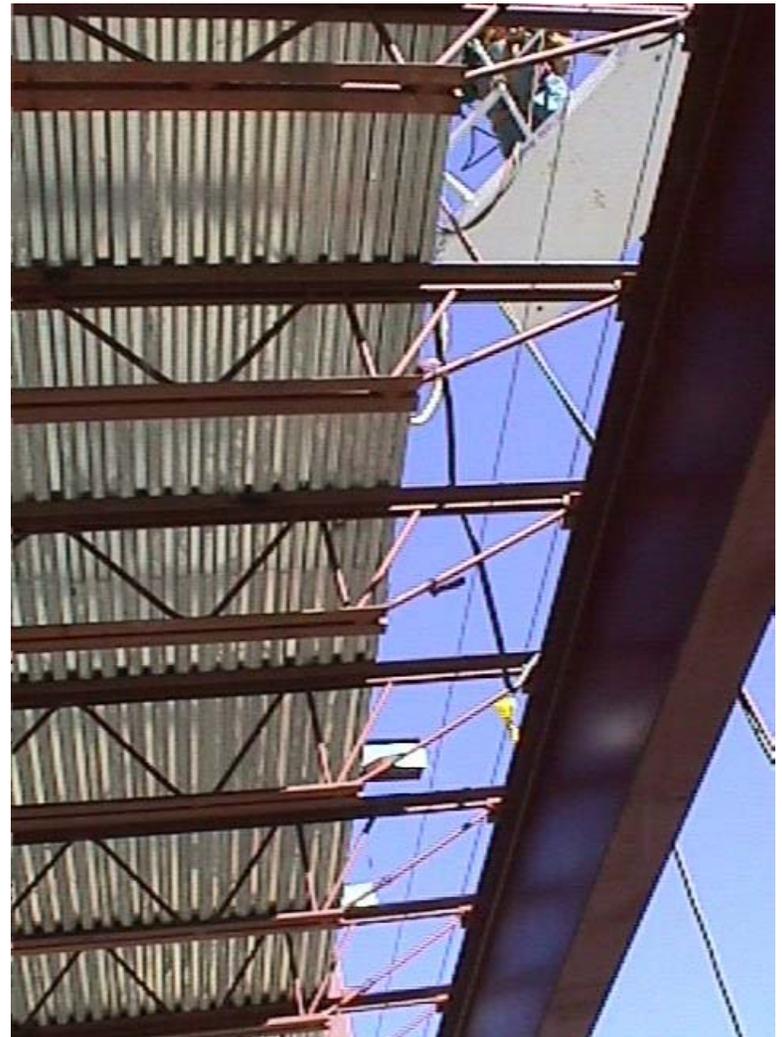
27.E.01 Requirement

**Single bolt on each end
on same size results
is serious falls**



OPEN WEB JOISTS

**No Load on Open Web Joists until framework is permanently in place
27.E.04**



Bridging in Open Web Joists

**No Load placed on
Open Web Joists
until all Bridging
is completely and
permanently put
in place.**

27.E.04 a



Wire Rope Top & Mid Rails



Wire Rope Safety Railing must be a minimum of 1/2" Dia.

Flags no more than 6' Apart

**Deflection no more than 2" with 200 lb. Force out and down
Kept tight with a turnbuckle**

Cable clamps minimum number installed correctly

See Section 27.F.04

CABLE CLAMP

3 MAJOR PARTS

1. NUTS
2. “U” BOLT
3. SADDLE

**NEVER SADDLE A
DEAD HORSE!!!**

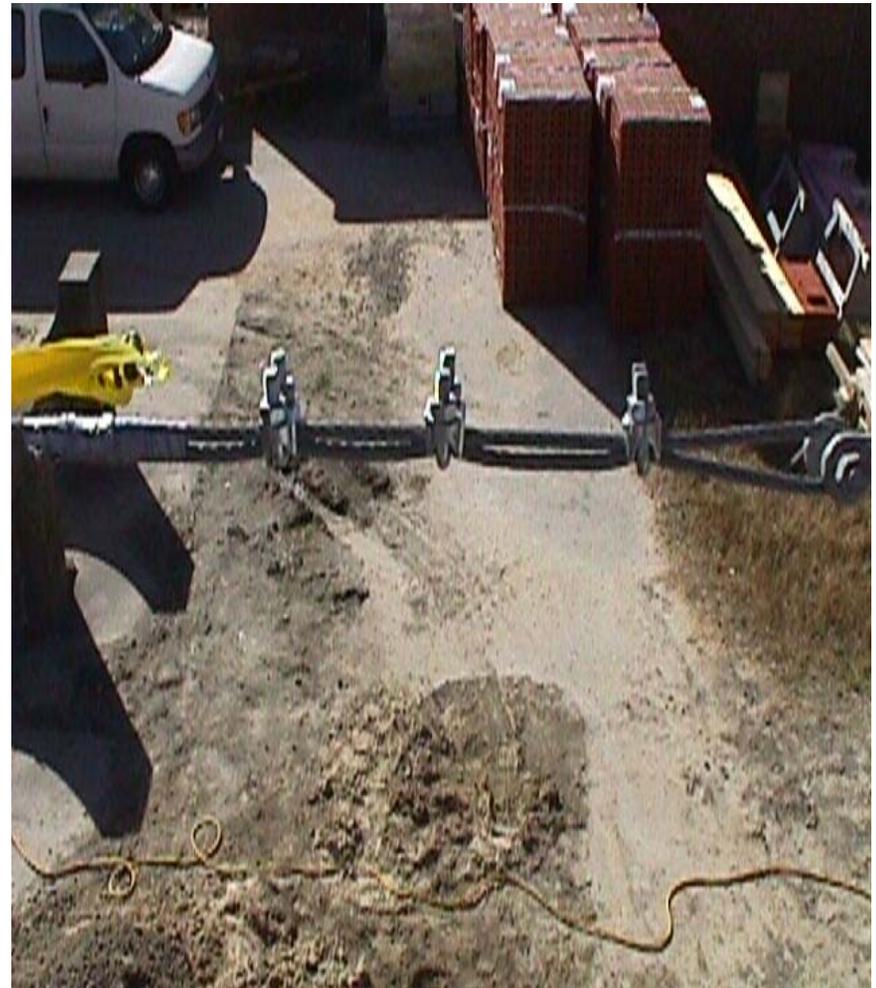


CABLE CLAMPS (Wire Rope Clip)

**MINIMUM NUMBER
IS ALWAYS 3**

**SPACING EQUAL
CABLE DIAMETER
TIMES 6**

**NEVER USED TO
SPLICE WIRE ROPE**



Wire Rope Clip Requirements

COE Section 15.B

Figure 15-1



CHRISTMAS TREE LIFTING IS STRICTLY PROHIBITED!!

COE SECTION
15.A.L08



CHRISTMAS TREE LIFTING

**THE TANDEM LIFTING OF STEEL
(MULTIPLE STEEL MEMBERS RIGGED
TOGETHER) BY ONE CRANE.**

**THIS WOULD APPLY TO THE TANDEM
LIFTING OF ANY TYPE PRODUCT
INCLUDING WOOD BY ONE CRANE!**

DECKING INSTALLATION

Temporary flooring is to be installed over the entire surface. Planking or decking is to be proper thickness to support load but no less than 3/4" plywood. OSHA 1926 Subpart "R"



FALL PROTECTION POSITIONING DEVICE

**BODY BELT IS TO
BE USED AS A
POSITION DEVICE
ONLY!!!**

**PFAS (HARNESS)
TO BE USED AS
FALL PROTECTION**



FALL PROTECTION QUESTION



**CAN A BODY BELT
BE USED IN AN AREIAL
LIFT OR BUCKET
TRUCK?**

**SEE COE 22.K.06 b
1926.453 (2) (v)
COE 22.J.07**

100% FALL PROTECTION?

DOUBLE LANYARD SYSTEM

COE 21.C.05

