



REPAIR OF EARTHQUAKE DAMAGED CHIMNEYS

To facilitate the repair of chimneys the Building Division of the City of Santa Clara has approved the following procedures and details. Any of the appropriate details may be used.

Damaged masonry in reinforced chimneys shall be removed and replaced. Existing reinforcing steel may be used if it can be straightened, otherwise it shall be cut off and extended by welding. Where existing vertical reinforcing steel has been spliced by the use of "C" clamps and slippage is evident, the splice shall be welded.

MASONRY CHIMNEYS

Masonry chimneys may be rebuilt using one of the following methods:

1. For chimneys damaged at or above the roof line, use Section "A" together with detail "A-1", "A-2", "A-3", or "B-1".
2. For chimneys damaged below the roof line and above the firebox, use Section "B" together with detail "B-1".

GENERAL NOTES

The firebox and undamaged areas of all chimneys to be rebuilt shall be carefully inspected to determine that no cracks or voids are present that would permit the access of flames to the surrounding wood frame.

Anchorage straps shall be inspected and, if loose, shall be bolted to joists or rafters. Permits shall be obtained for all chimney repairs.

GENERAL SPECIFICATIONS

Masonry:

- A. Brick (HW Grade) ASTM – designation C73
- B. Concrete block (ASTM designation C90) (Fill all cells)

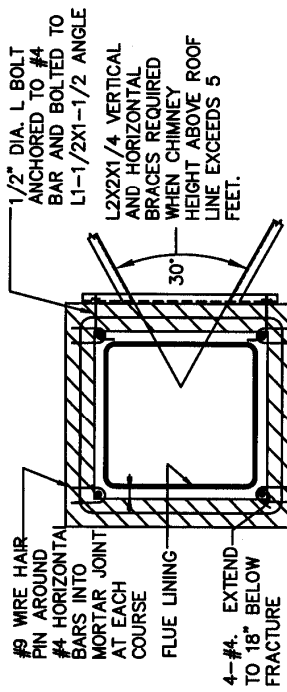
Concrete: Grade "C" Concrete

Steel Reinforcing: ASTM design A615

Mortar: 1 – 4-1/2 – 1/2 part lime putty or hydrated lime
1 (Plastic Cement) – 3-max. 1/10 part lime

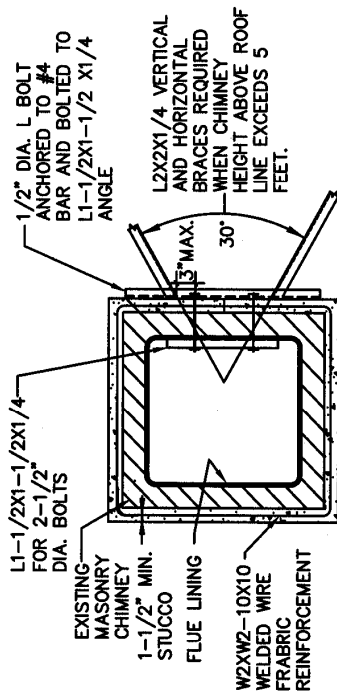
Grout: 1 – 3 max. 1/10 part lime

Flue Lining: Terra cotta, fire clay or other UL rated flue liners.



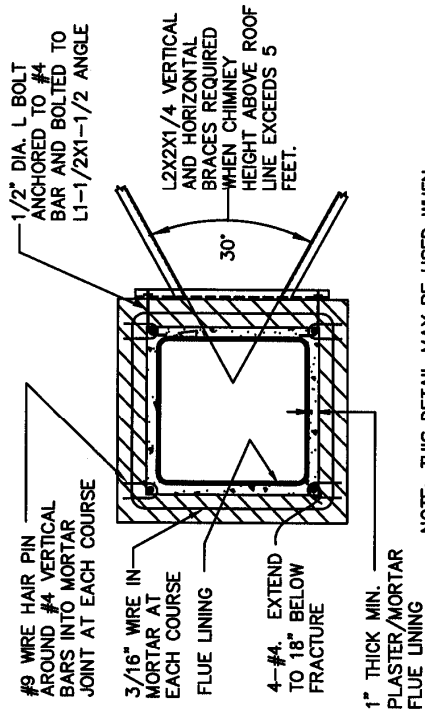
NOTE: THIS DETAIL MAY BE USED WHEN FRACTURES OCCUR 1' ABOVE ROOF LINE

DETAIL A-1



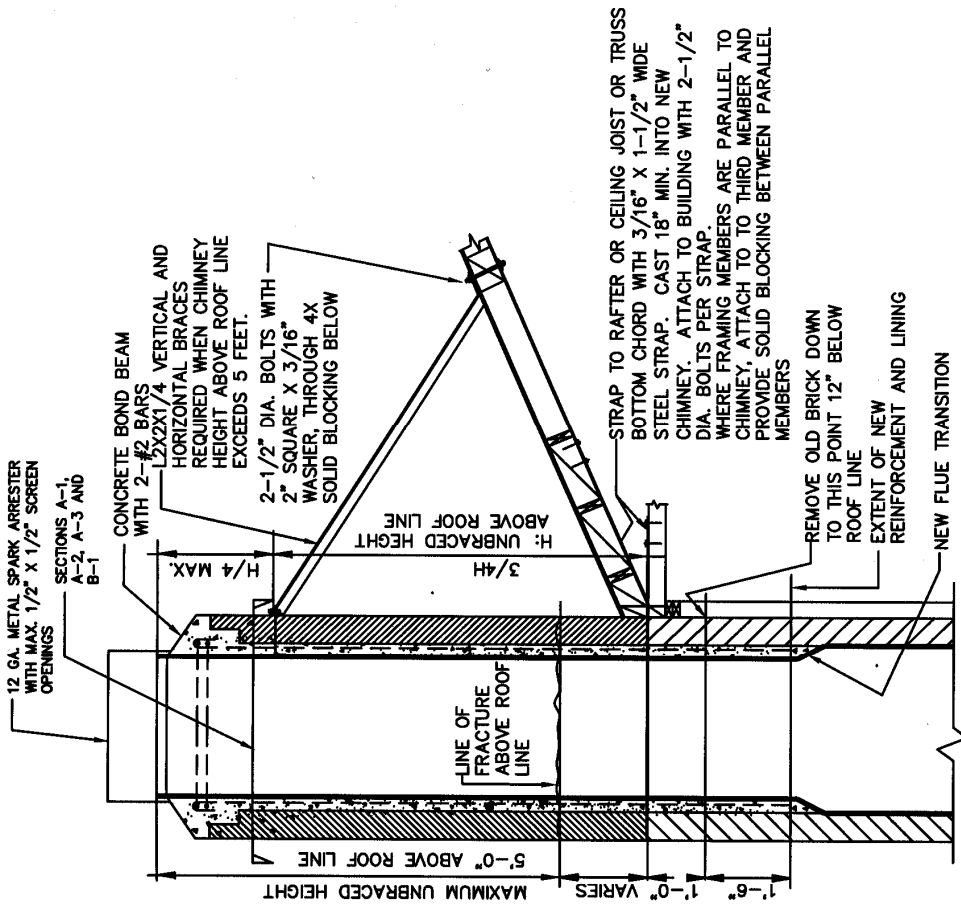
NOTE: THIS DETAIL MAY BE USED WHEN FRACTURES OCCUR 1' ABOVE ROOF LINE

DETAIL A-2



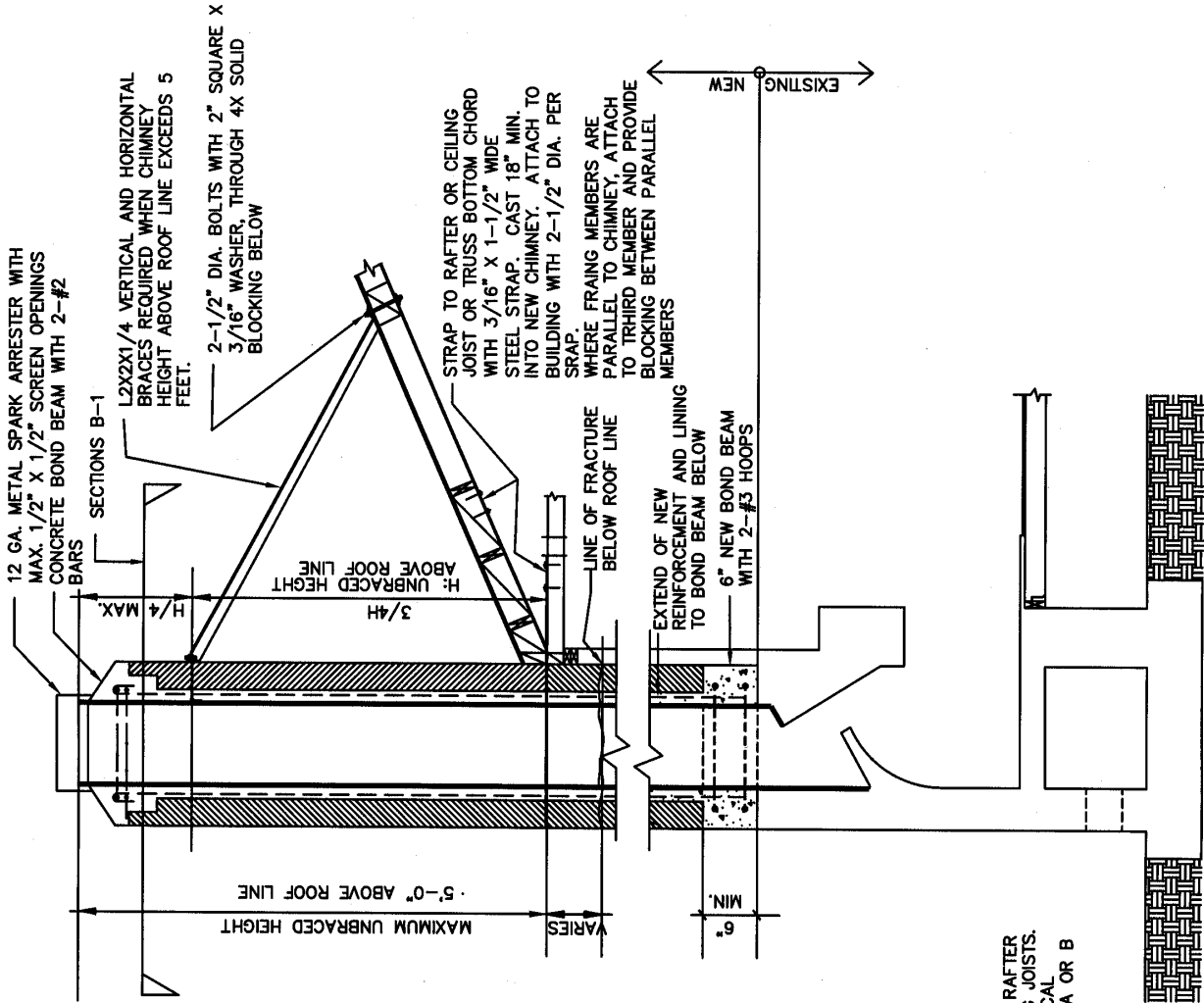
NOTE: THIS DETAIL MAY BE USED WHEN FRACTURES OCCUR 1' ABOVE ROOF LINE

DETAIL A-3

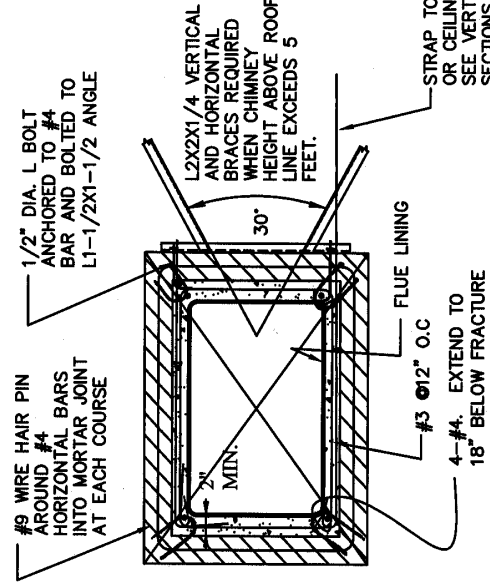


RECONSTRUCTION OF MASONRY CHIMNEYS FRACTURED ABOVE ROOF LINE

VERTICAL SECTION A



RECONSTRUCTION OF MASONRY CHIMNEYS FRACTURED BELOW ROOF LINE
VERTICAL SECTION B



NOTE: THIS DETAIL MAY BE USED WHEN FRACTURES OCCUR ABOVE ROOF LINE PROVIDED EXISTING CHIMNEY IS DOUBLE COURSE CONSTRUCTION

DETAIL B-1