HOLLOW METAL MANUAL

NAAMM STANDARD

HMMA 820-87

METAL DOORS & FRAMES 8d NAAMM 2/87

HOLLOW METAL FRAMES

NAAMM 2/87 8d METAL DOORS & FRAMES

HMMA
HOLLOW METAL MANUFACTURERS ASSOCIATION

A Division of
NAAMM
NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS

Hollow Metal Manufacturers Association

Division of the National Association of Architectural Metal Manufacturers

This manual was developed by representative members of the Hollow Metal Manufacturers Association Division (HMMA) of the National Association of Architectural Metal Manufacturers (NAAMM) to provide information and guidance on the selection of hardware for hollow metal doors and frames. This manual contains advisory information only and is published as a public service by NAAMM and its HMMA Division.

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National Association of Architectural Metal Manufacturers

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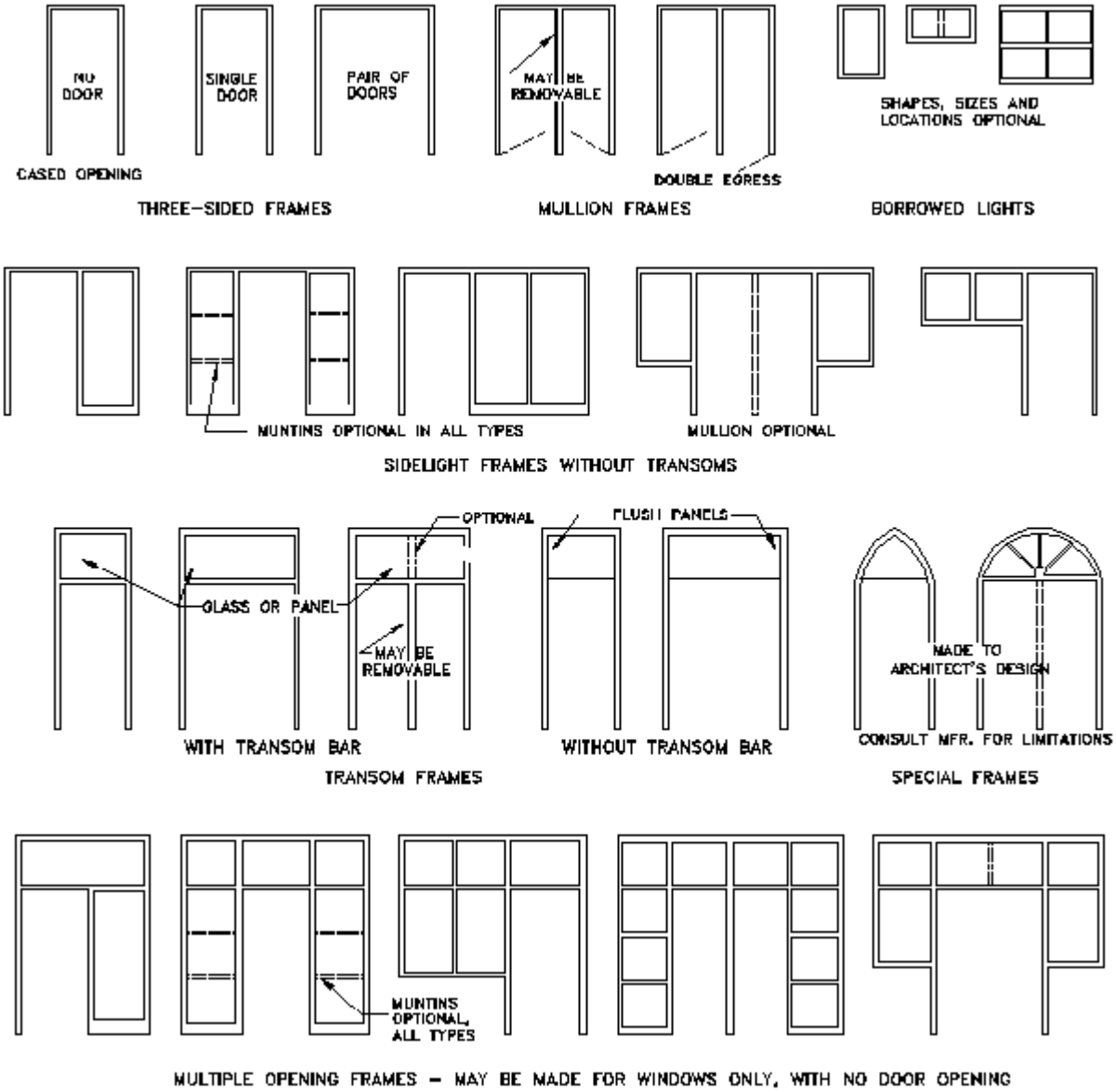
HOLLOW METAL FRAMES

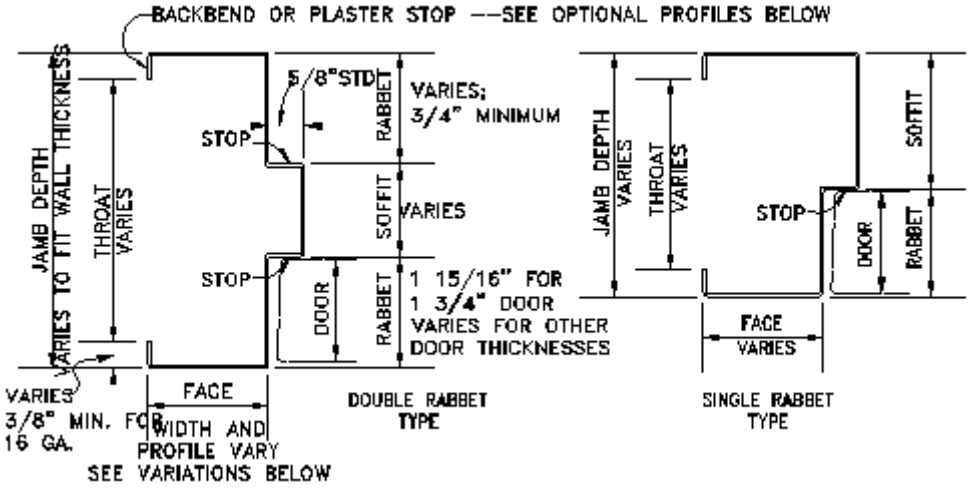
The prime functions of the door frame are to hold the door and its controls in the opening, and to trim the opening. But frames often serve other esthetic or functional purposes also, such as trimming a wall opening having no door, or enclosing glazed areas that provide through-wall visibility or admitting light and/or air. Hollow metal frames, which are strong, sturdy and durable, serve all such functions economically.

The variety of configurations available in custom hollow metal frames is virtually unlimited. Illustrated below are some of the more common and representative types and on the following pages are shown the typical details of frame construction and assembly.

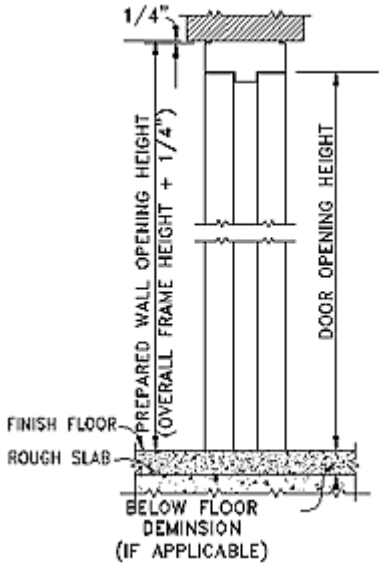
FRAME OPENING TYPES



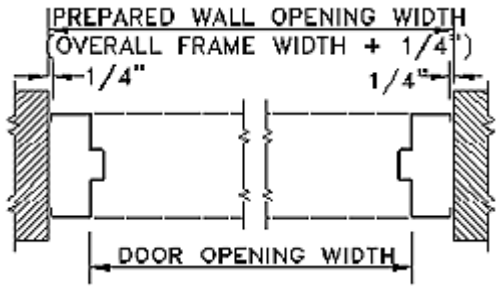
BASIC DOOR FRAME PROFILES AND THEIR PARTS



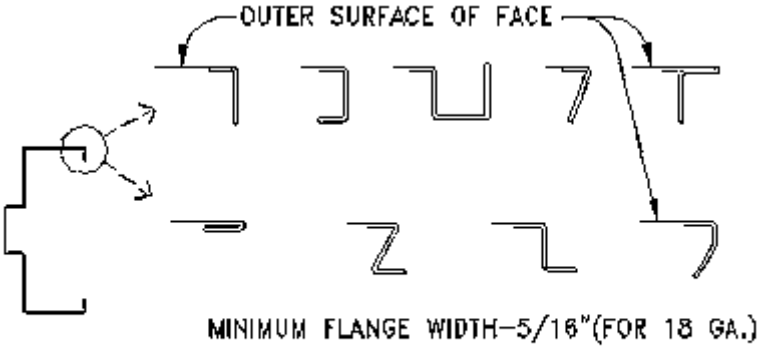
VERTICAL FRAME DIMENSIONS



HORIZONTAL FRAME DIMENSIONS

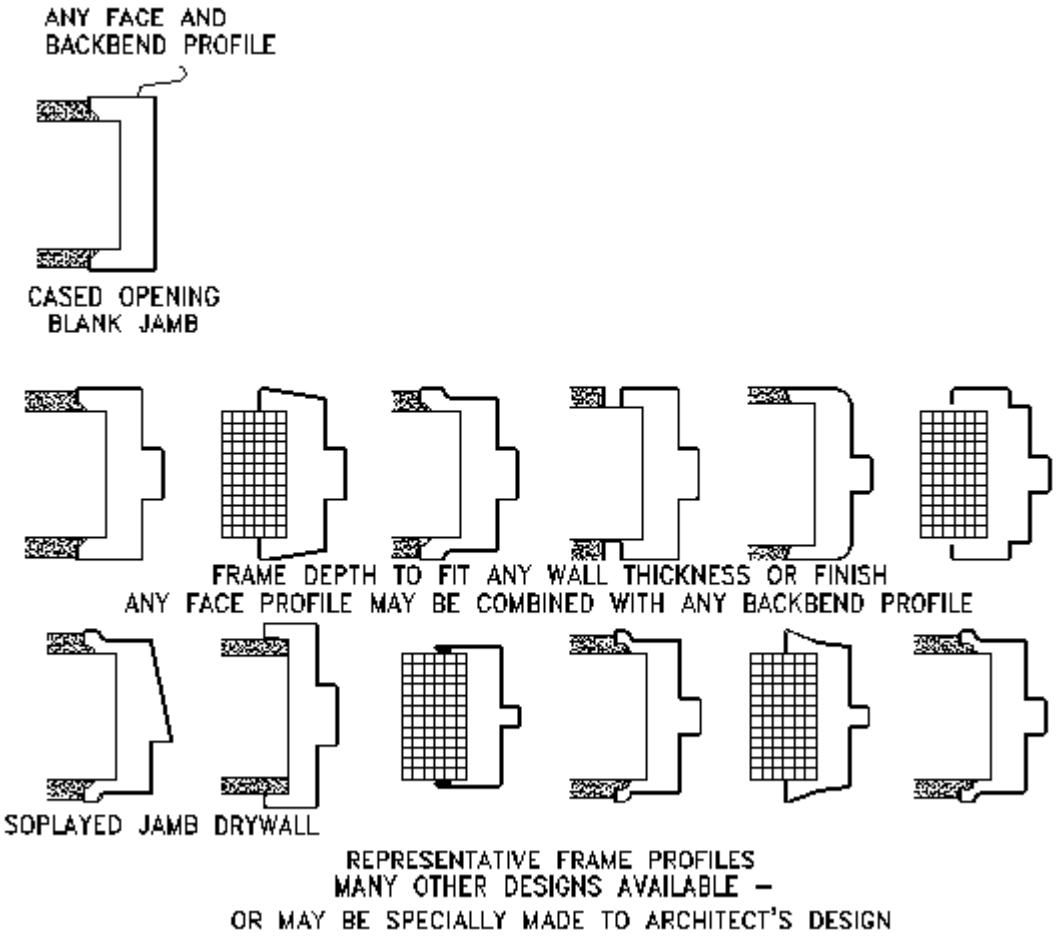


TYPICAL BACKBEND OR PLASTER STOP PROFILES



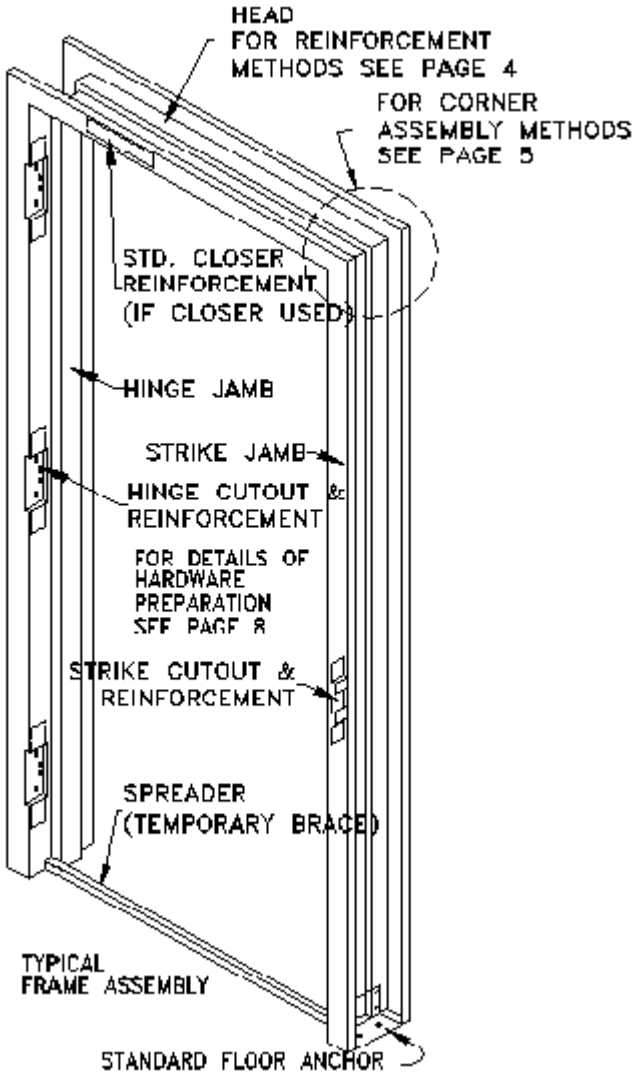
BACKBENDS NEEED NOTY BE THE SAME ON OPPOSITE
TRIM FACES -- ANY COMBINATION MAY BE USED

REPRESENTATIVE FRAME PROFILES

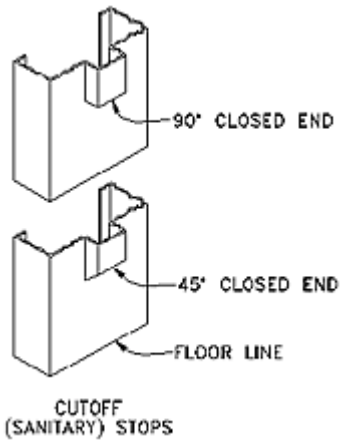


REPRESENTATIVE FRAME PROFILES
MANY OTHER DESIGNS AVAILABLE -
OR MAY BE SPECIALLY MADE TO ARCHITECT'S DESIGN

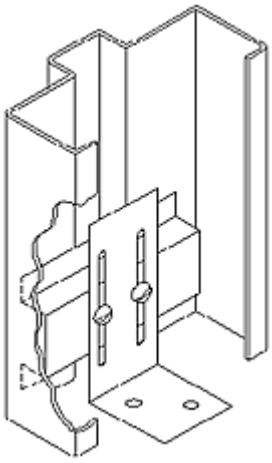
TYPICAL FRAME ASSEMBLY



CUTOFF (SANITARY) STOPS

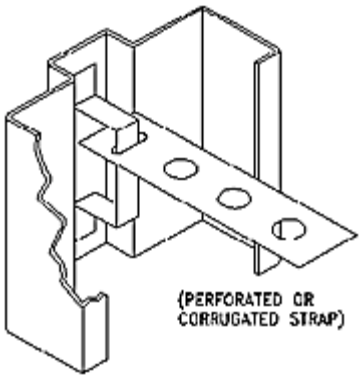


ADJUSTABLE FLOOR ANCHOR

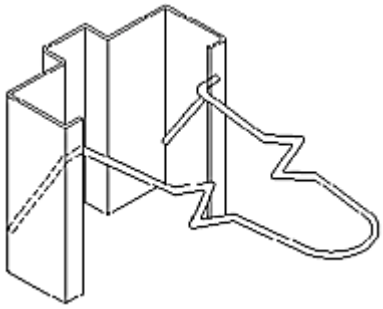


COMMON TYPES OF JAMB ANCHOR FOR PRE-SET FRAMES

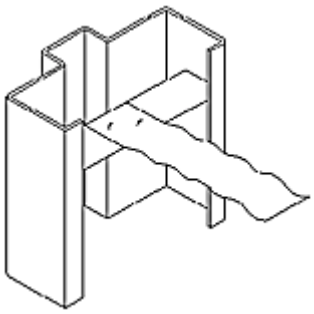
STRAP AND STIRRUP



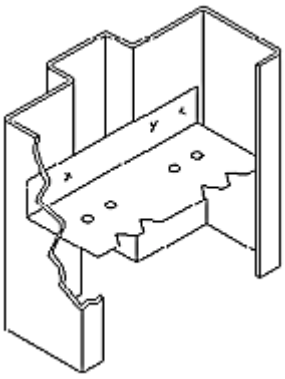
WIRE LOOP



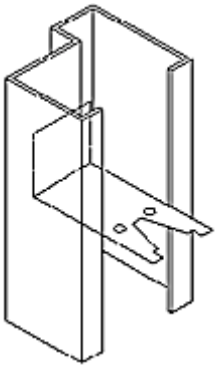
T-STRAP



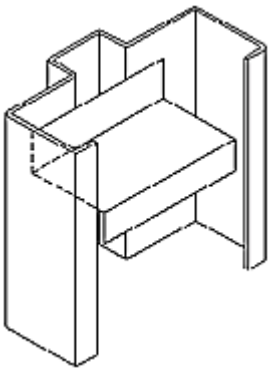
METAL WIRE STUD



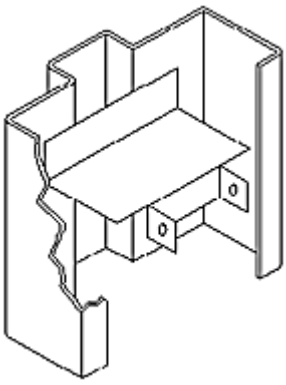
SOLID PLASTER



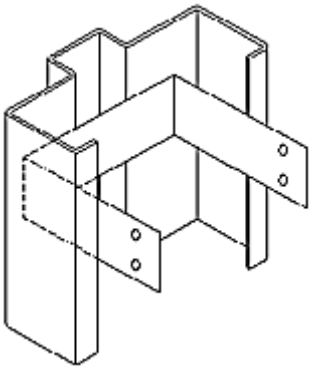
METAL CHANNEL STUD



WOOD STUD 1

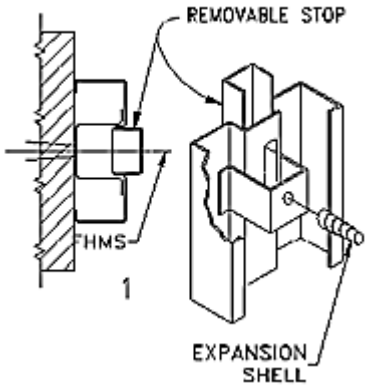


WOOD STUD 2

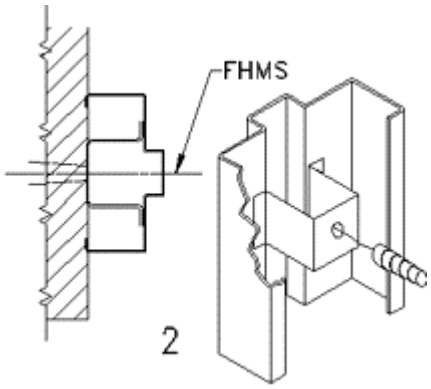


ANCHORAGE OF FRAMES IN PREPARED OPENINGS

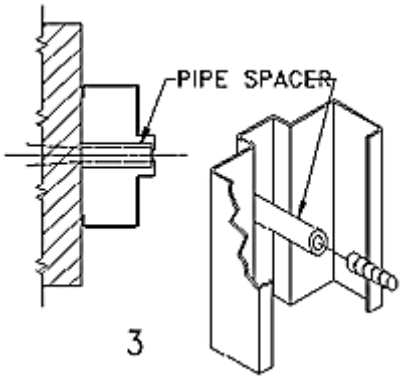
EXPANSION SHELL



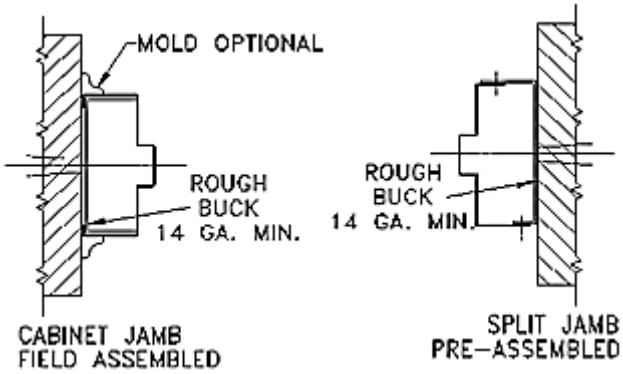
EXPANSION SHELL WITHOUT REMOVABLE STOP



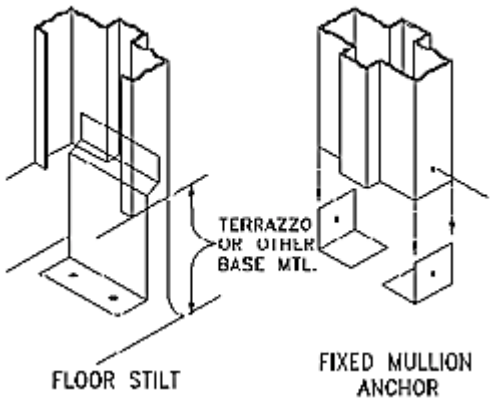
PIPE SPACER



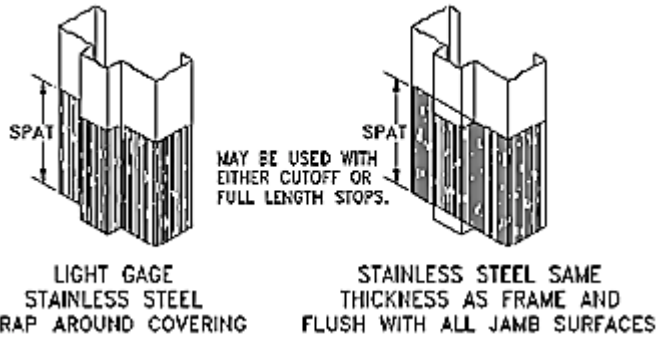
FRAMES WITH ROUGH BUCK



FLOOR STILT AND FIXED MULLION ANCHOR



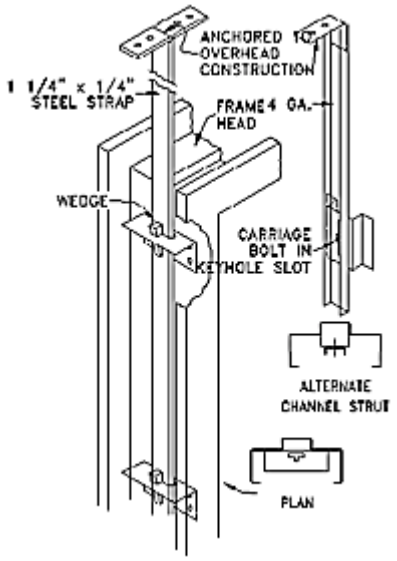
SPATS



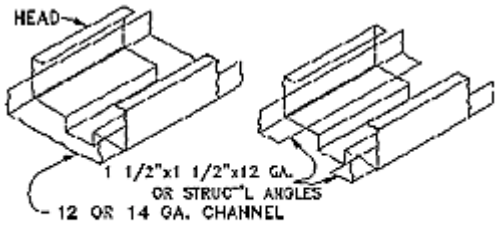
LIGHT GAGE STAINLESS STEEL WRAP AROUND COVERING

STAINLESS STEEL SAME THICKNESS AS FRAME AND FLUSH WITH ALL JAMB SURFACES

CEILING STRUTS

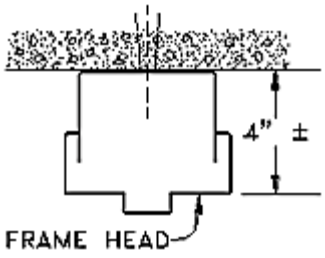


HEAD REINFORCEMENT



USED ON WIDE OPENINGS TO PREVENT DEFLECTION AND POSIBLE INTERFERENCES WITH DOOR OPERATION SHOULD NEVER BE USED IN PLACE OF STRUCTURAL LINTEL

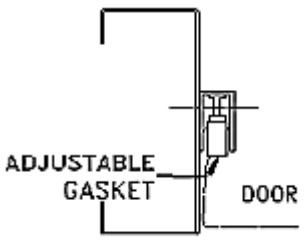
HEAD ADAPTER



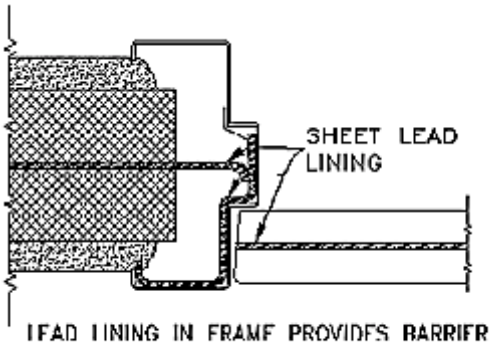
HEAD ADAPTER

FOR FRAMES EXTENDING FROM SLAB TO SLAB

SOUND BARRIER FRAME

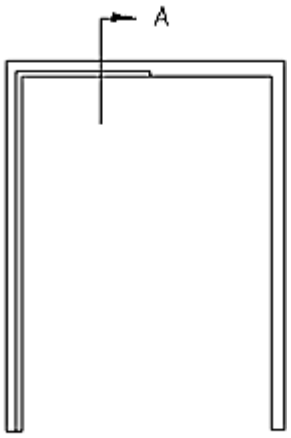


LEAD-LINED FRAME

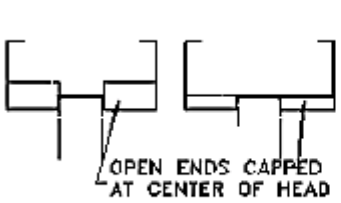


LEAD LINING IN FRAME PROVIDES BARRIER TO X-RAYS, WHICH TRAVEL IN STRAIGHT LINE, IN GAP BETWEEN LEAD-LINED WALL AND DOOR

DETAILS OF DOUBLE EGRESS FRAME



KEY ELEVATION

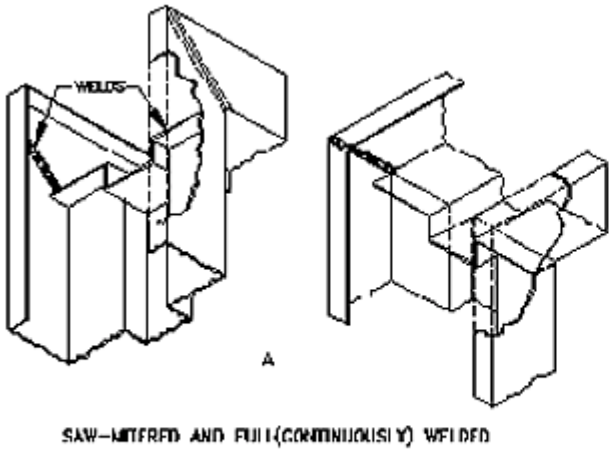


ALTERNATE HEAD SECTIONS "A"

JAMB SECTIONS

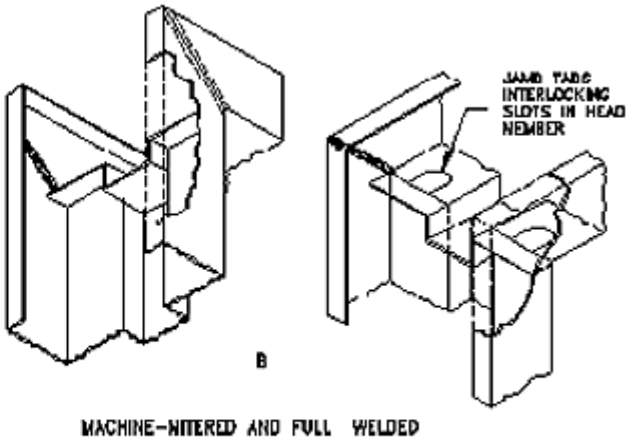
PRE-ASSEMBLED WELDED FRAMES - REPRESENTATIVE CORNER JOINT DETAILS

SAW-MITERED AND FULL (CONTINUOUSLY) WELDED



SAW-MITERED AND FULL (CONTINUOUSLY) WELDED

MACHINE-MITERED AND FULL WELDED

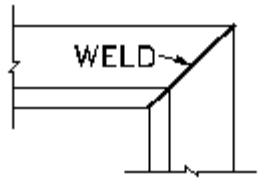


MACHINE-MITERED AND FULL WELDED

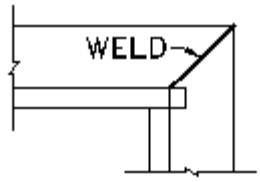
ALL EXPOSED WELDS GROUND AND FINISHED SMOOTH

MACHINE-MITERED, FACES ONLY WELDED (diagram missing)

MACHINE-MITERED FACES MITERED, STOPS BUTTED

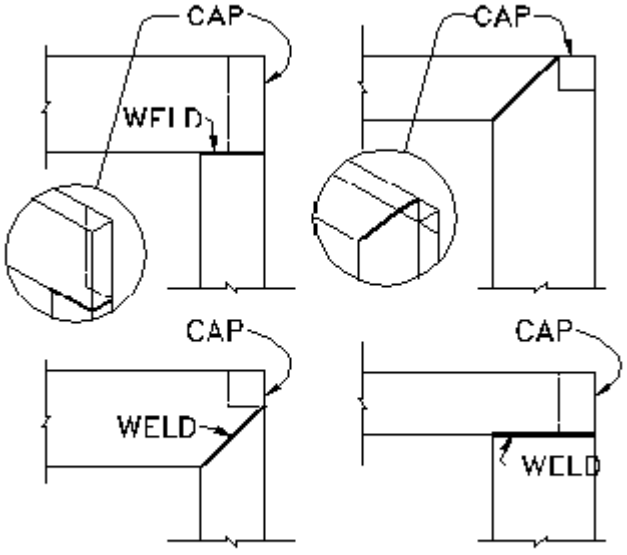


SAW–MITERED
OR "FULL–MITERED"
(METHOD A)



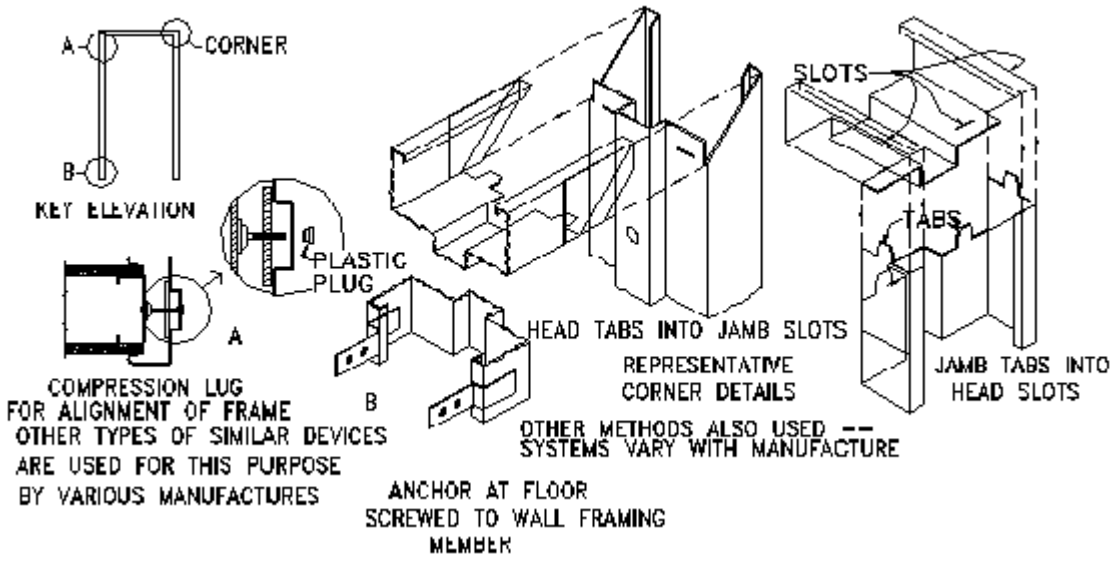
MACHINE–MITERED
FACES MITERED, STOPS BUTTED
(METHODS B & C)

METHODS OF JOINING FACES OF UNEQUAL WIDTHS

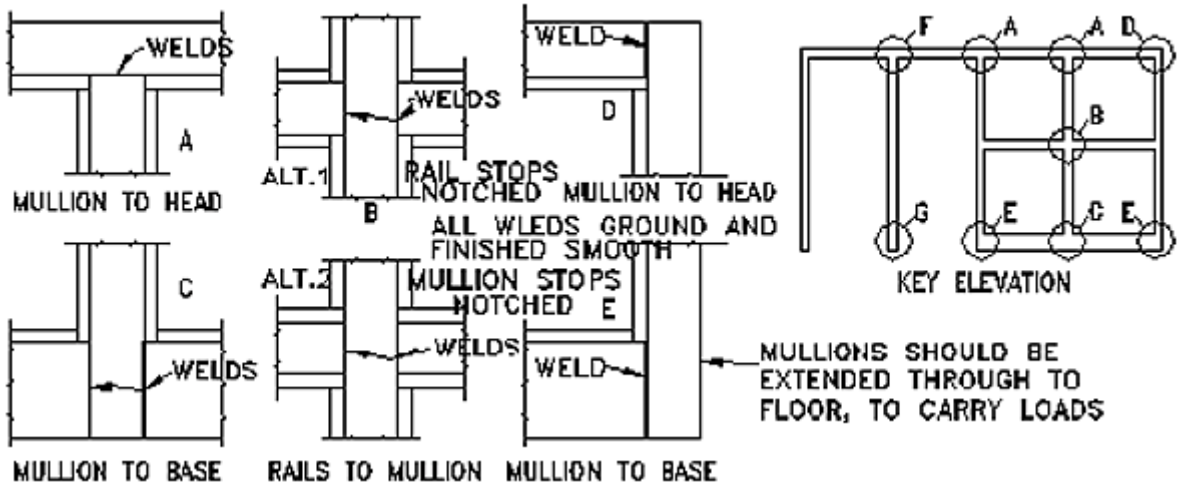


METHODS OF JOINING
FACES OF UNEQUAL WIDTHS

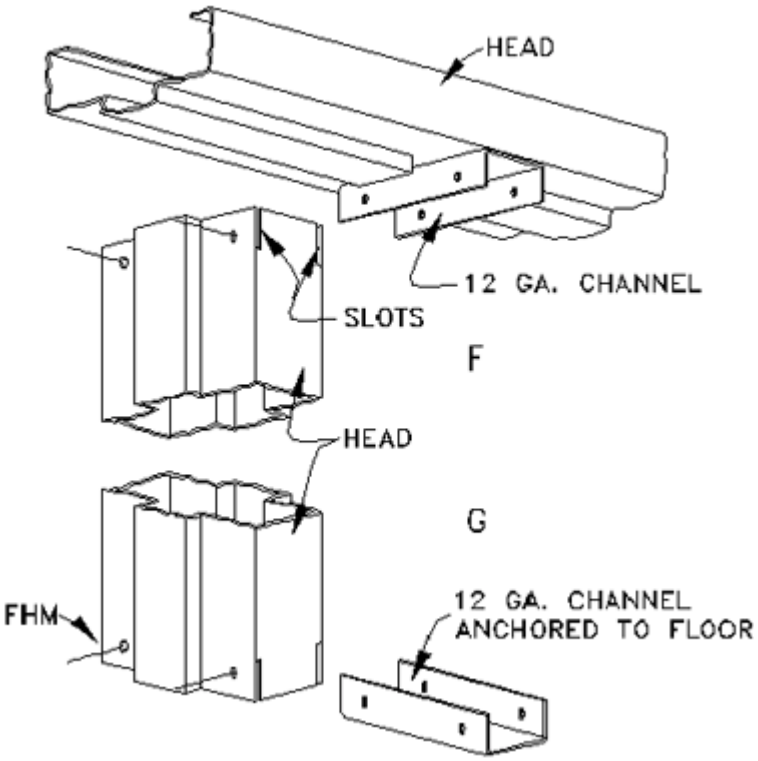
FIELD-ASSEMBLED (DRY-WALL) FRAMES - TYPICAL ASSEMBLY DETAILS



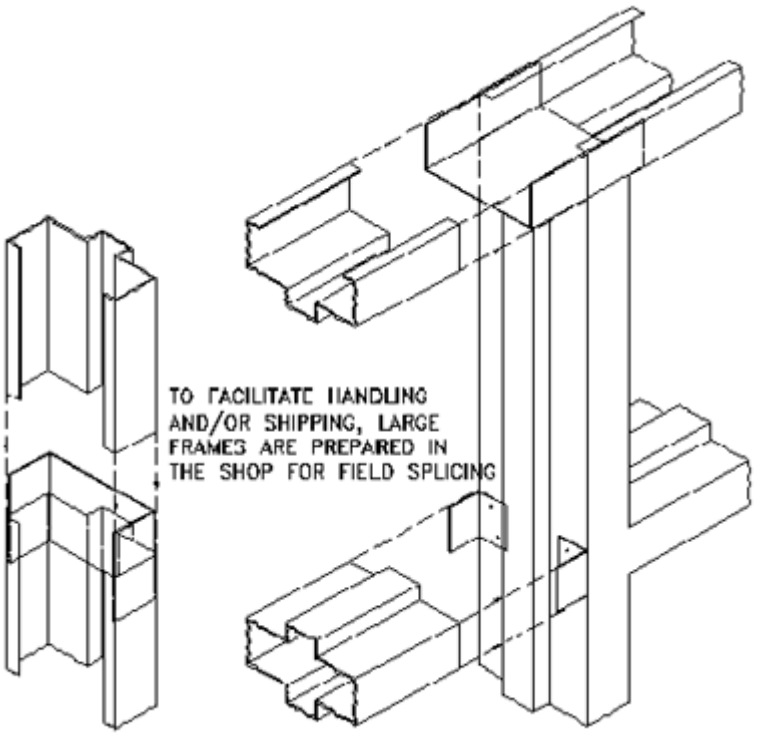
BUTTED AND FACE-WELDED ASSEMBLY JOINTS



ANCHOR FOR REMOVABLE MULLION



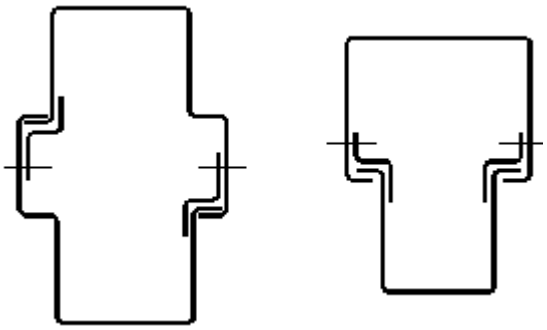
FIELD SPLICES FOR LARGE MULTI-OPENING FRAMES



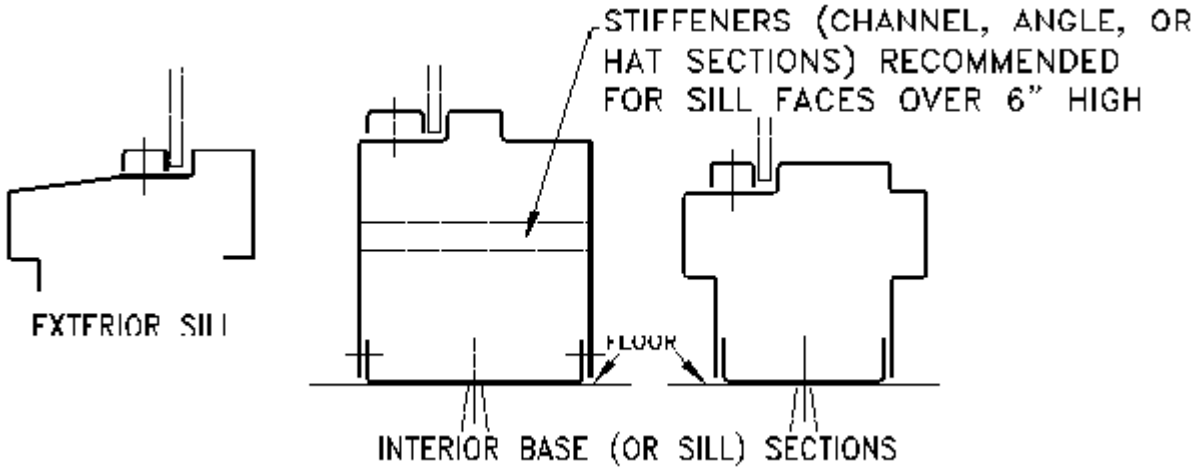
TYPICAL DETAILS OF FRAMING MEMBERS, ASSEMBLY AND ANCHORAGE

Note: Mullion clips same gage as frames based 24" o.c. max.

MULLION SECTIONS

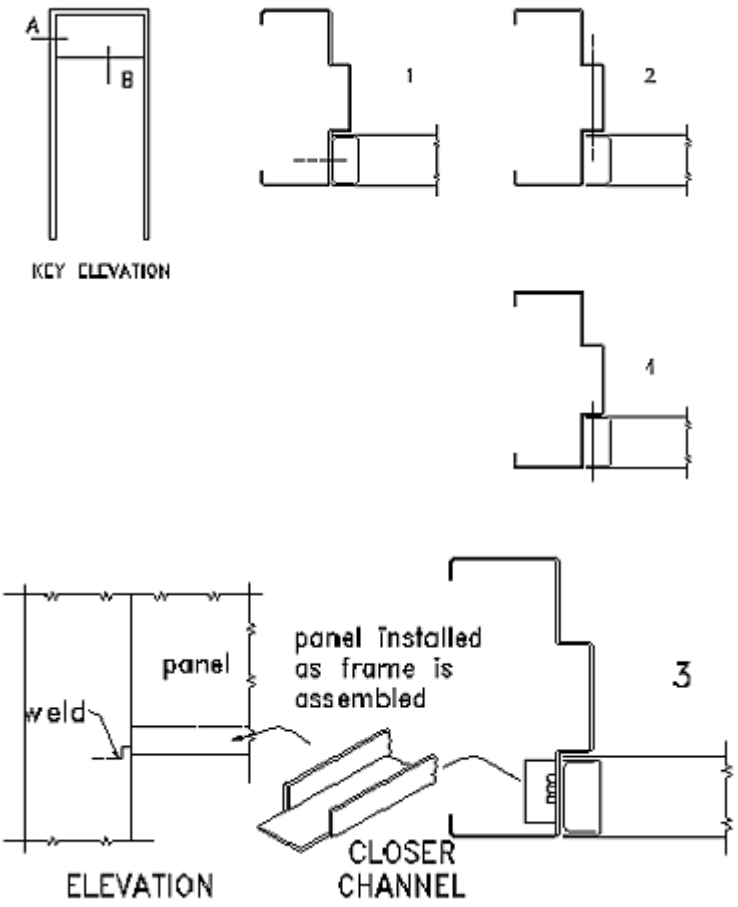


INTERIOR BASE (OR SILL) SECTIONS

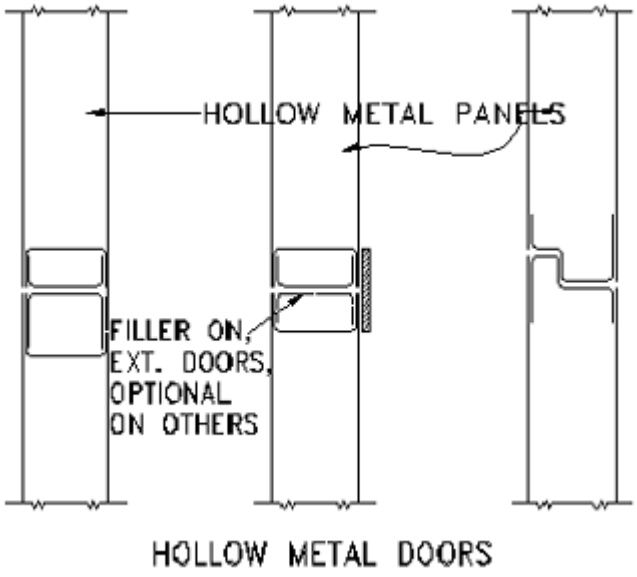


TRANSOM PANEL FRAMES WITHOUT TRANSOM BARS

ALTERNATIVES -SECTION A- HOLLOW METAL PANELS



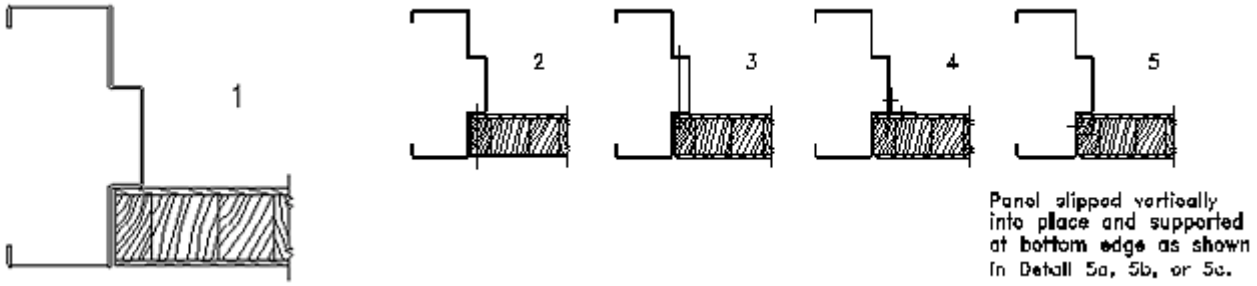
ALTERNATIVES -SECTION B



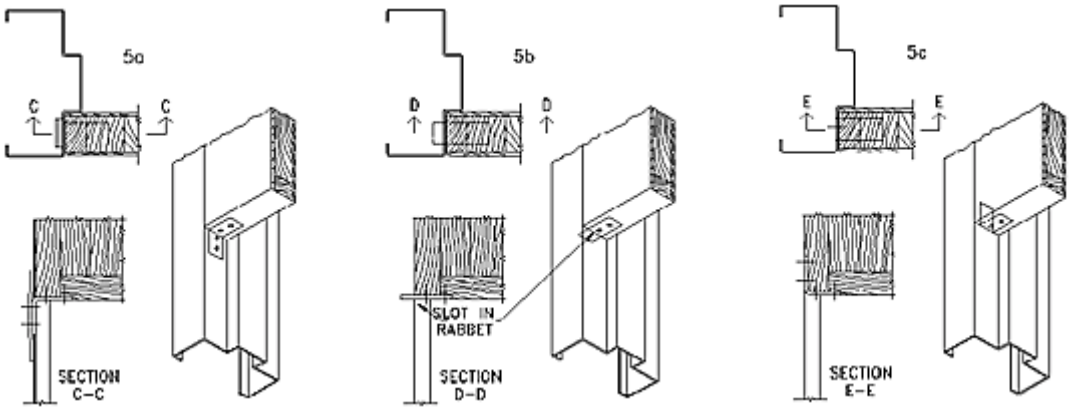
ALTERNATIVES -SECTION A- WOOD PANEL

PANEL NOT REMOVEABLE

METHODS PERMITTING REMOVAL OF PANEL

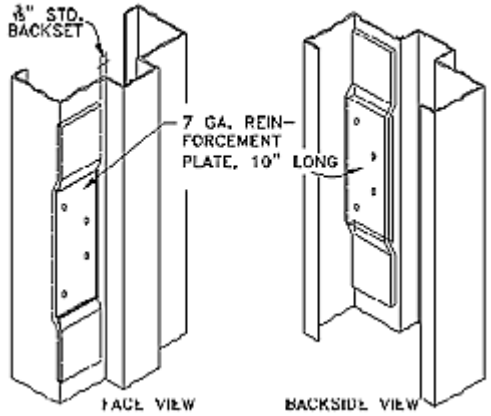


VERTICAL PANELS

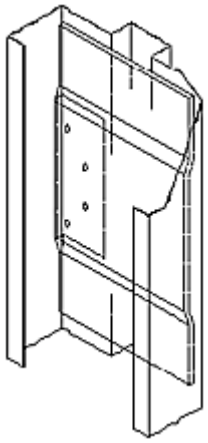


TYPICAL HARDWARE PREPARATIONS

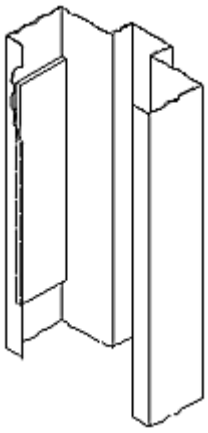
STANDARD HINGE PREPARATION



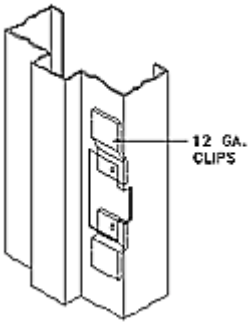
FULL-WIDTH HINGE REINFORCEMENT



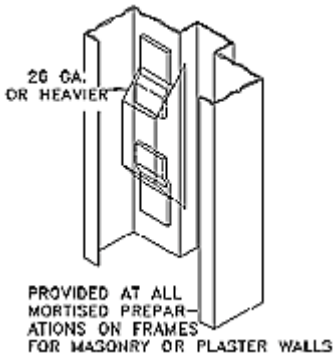
PREPARATION FOR SURFACE-MOUNTED HINGE



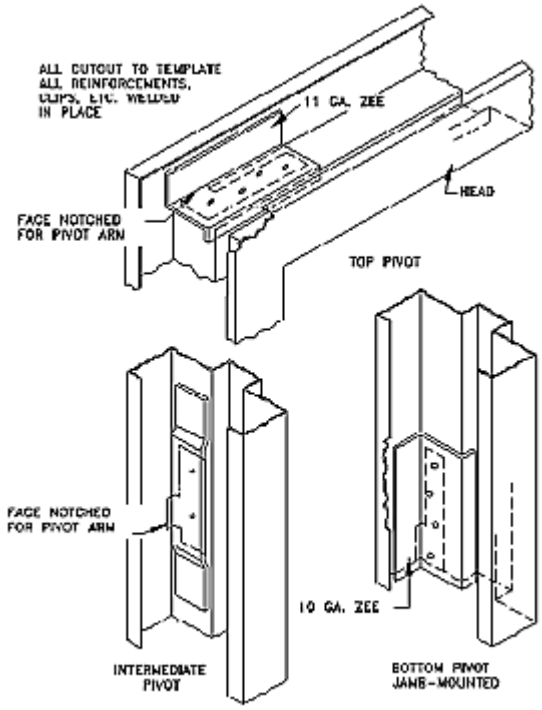
STRIKE PREPARATION



MORTAR GUARD

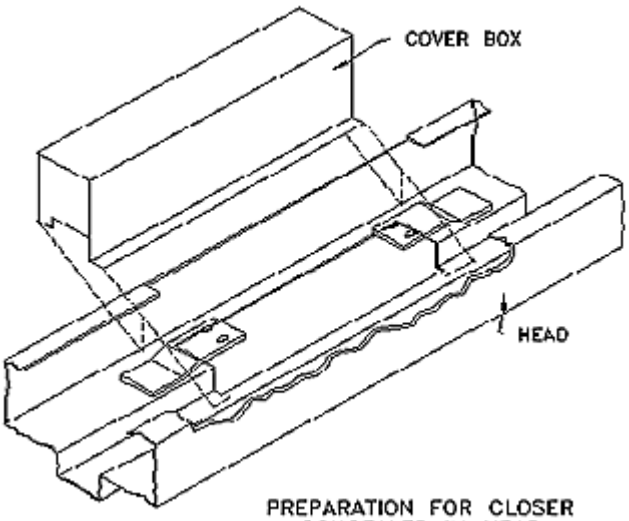


PREPARATION FOR PIVOTS



PREPARATION FOR PIVOTS

PREPARATION FOR CLOSER
CONCEALED IN HEAD



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