



STEEL, IRON PIPE, OR CONDUIT WITH INSUL

FIRESTOP SEALANT

CONC BLOCK WALL

CONC BLOCK WALL

MINERAL WOOL BATT

FIRESTOP SEALANT

STEEL, IRON PIPE, OR CONDUIT WITH INSUL

WRAPSTRIP

INSULATED METALLIC PIPE THROUGH CMU WALL
UL DESIGNS C-AJ-5051 OR C-AJ-5042

METALLIC PIPE THROUGH CMU WALL
UL DESIGN C-AJ-1079

CONC BLOCK WALL

PLASTIC PIPING
4" MAX SIZE

FIRESTOP COLLAR

STEEL MASONRY EXPANDING
ANCHORS AND FENDER WASHERS

CONC BLOCK WALL

FIRESTOP SEALANT

PLASTIC PIPING
4" MAX SIZE

FIRESTOP COLLAR

STEEL MASONRY EXPANDING
ANCHORS AND FENDER WASHERS

PLASTIC PIPE THROUGH CMU WALL
UL DESIGN C-AJ-2063

PLASTIC PIPE THROUGH CMU WALL
UL DESIGN C-AJ-2063

The diagrams illustrate two methods for firestopping steel pipes or conduits passing through a concrete block wall.

Left Diagram (Firestop Mortar and Wrapstrip Method):

- CONC BLOCK WALL:** The concrete block wall through which the pipe passes.
- FIRESTOP MORTAR TO FULL DEPTH OF WALL:** Mortar applied to the top and bottom of the pipe penetration.
- STEEL, IRON PIPE, OR CONDUIT:** The pipe or conduit passing through the wall.
- STEEL, IRON PIPE, OR CONDUIT WITH INSUL:** The pipe or conduit wrapped with insulation.

Right Diagram (Firestop Mortar and Insulation Method):

- CONC BLOCK WALL:** The concrete block wall through which the pipe passes.
- FIRESTOP MORTAR TO FULL DEPTH OF WALL:** Mortar applied to the top and bottom of the pipe penetration.
- STEEL, IRON PIPE, OR CONDUIT:** The pipe or conduit passing through the wall.
- STEEL, IRON PIPE, OR CONDUIT WITH INSUL:** The pipe or conduit wrapped with insulation.
- WRAPSTRIP:** A strip of material used to seal the joint between the pipe and the wall.

NOTE: WHERE PIPES PENETRATE CONC WALL
FROM TUNNEL, USE UL APPROVED SEAL
BAGS BY FLAMESAFE OR EQUAL

MULTIPLE PIPES THROUGH CMU OR CONC WALL
UL DESIGN C-AJ-8033

MULTIPLE PIPE / CABLE TRAY THROUGH CMU WALL
UL DESIGN C-AJ-8016

ELECTRICAL CABLES THROUGH CMU WALL UL DESIGN C-AJ-3042

A cross-sectional diagram of a fireproofed concrete wall and roof assembly. The diagram shows a vertical wall on the left and a horizontal roof section on the right, separated by a vertical line. The wall is labeled 'CONC OR CONC BLOCK WALL'. The roof section is labeled 'METAL DECK ROOF OR CONC OVER METAL DECKING'. A 'FIREPROOF SEALANT' is shown as a wavy, hatched line along the top edge of the wall. A 'MINERAL WOOL BATT' is shown as a hatched area within the roof assembly, adjacent to the sealant. The roof assembly consists of a top layer of concrete (indicated by dots and triangles) and a bottom layer of mineral wool batt (indicated by diagonal lines). The diagram is a technical drawing with clear lines and labels.

PERPENDICULAR CONDITION

1, 2, 3, OR 4 HOUR RATED FIRESTOP FOR HEAD OF WALL
UL DESIGN C-AJ-0014, HWD-1001, J900Z010 & U900Z020

A cross-sectional diagram of a parapet wall assembly. The diagram shows a vertical wall structure with several layers. At the top, there is a horizontal layer labeled "STEEL PAN ROOF OR CONC OVER STEEL DECKING". Below this, the wall is composed of a "CONC OR CONC BLOCK WALL". The wall is shown with a break in the middle, indicated by two wavy lines. The wall is filled with a material labeled "MINERAL WOOL BATT". The top of the wall is finished with a layer labeled "FIREPROOF SEALANT, TYP". The bottom of the wall is labeled "BATT".

STEEL PAN ROOF OR CONC OVER STEEL DECKING

FIREPROOF SEALANT, TYP

MINERAL WOOL BATT

CONC OR CONC BLOCK WALL

BATT

PARALLEL CONDITION

				DESIGNED	WHR
				DRAWN	ALB
				CHECKED	H & S
3	AS BUILT	OCT 2007	RLT	PROJ. ENGR.	H & S
2	CONSTRUCTION	MAR 2004	RLT		
1	REGULATORY APPROVAL	NOV 2003	RLT		
NO.	ISSUED FOR	DATE	BY	APPROVED	

THIS DOCUMENT ORIGINALLY ISSUED
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RECORD DRAWING

THIS DRAWING HAS BEEN MODIFIED TO REFLECT FIELD CHANGES REPORTED BY THE CONTRACTOR OR ANOTHER PARTY, BUT NOT VERIFIED BY THE CERTIFYING ENGINEER. THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY WILLIAM H. RUSSELL, SEAL NUMBER 008532. THIS MEDIA SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

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CITY OF ROANOKE
VIRGINIA

REGIONAL WATER POLLUTION CONTROL PLANT PROCESS TRAIN IMPROVEMENTS

ARCHITECTURAL FIRESTOPPING DETAILS

THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.	DATE MARCH 2004	
	H & S JOB NUMBER 30788B	
	CONTRACT NUMBER B	DRAWING NUMBER A4