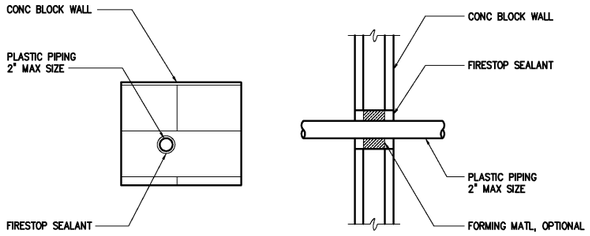
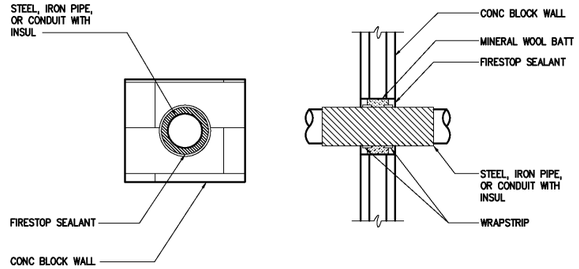
NOTES:

1. CONTRACTOR SHALL PROVIDE THE APPROPRIATE PENETRATION TO SUIT FIELD CONDITIONS FOR ALL FIRE RATED WALLS SEE PLANS.



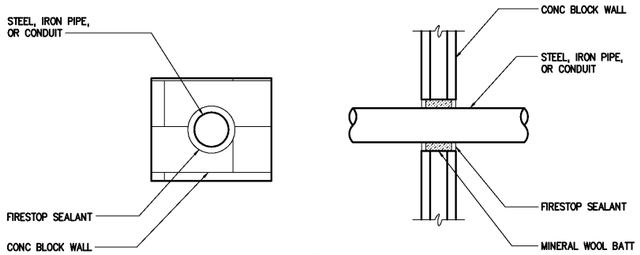
PLASTIC PIPE THROUGH CMU WALL
UL DESIGN C-AJ-2031

DETAIL	100
NTS	A4



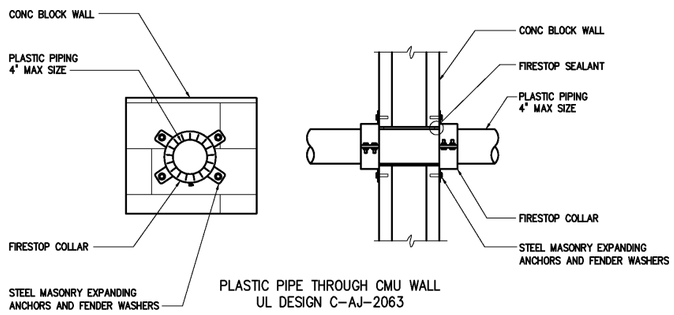
INSULATED METALLIC PIPE THROUGH CMU WALL
UL DESIGNS C-AJ-5051 OR C-AJ-5042

DETAIL	101
NTS	A4



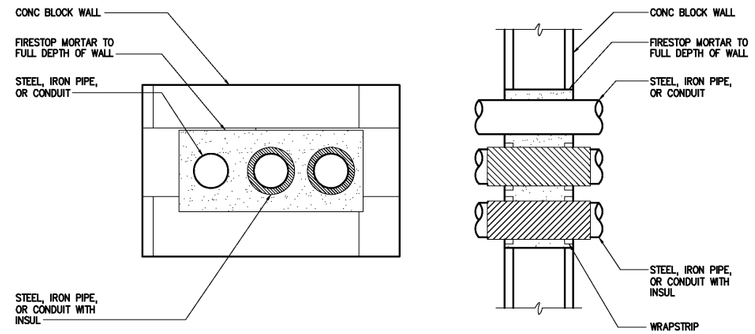
METALLIC PIPE THROUGH CMU WALL
UL DESIGN C-AJ-1079

DETAIL	102
NTS	A4



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

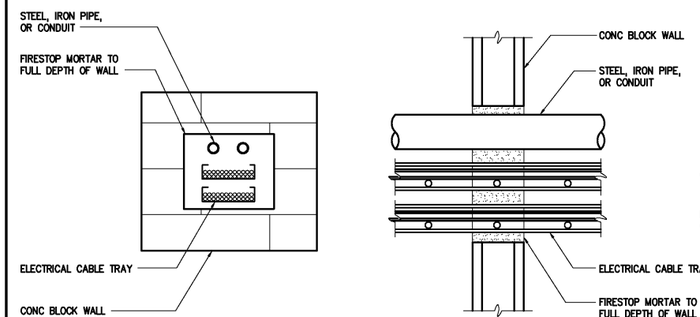
DETAIL	103
NTS	A4



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

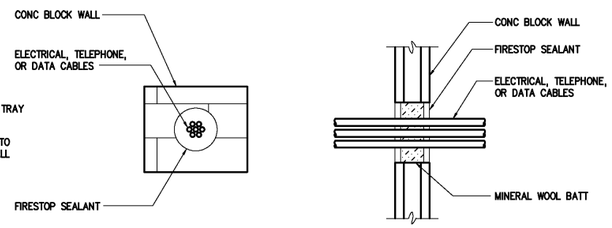
MULTIPLE PIPES THROUGH CMU OR CONC WALL
UL DESIGN C-AJ-8033

DETAIL	104
NTS	A4



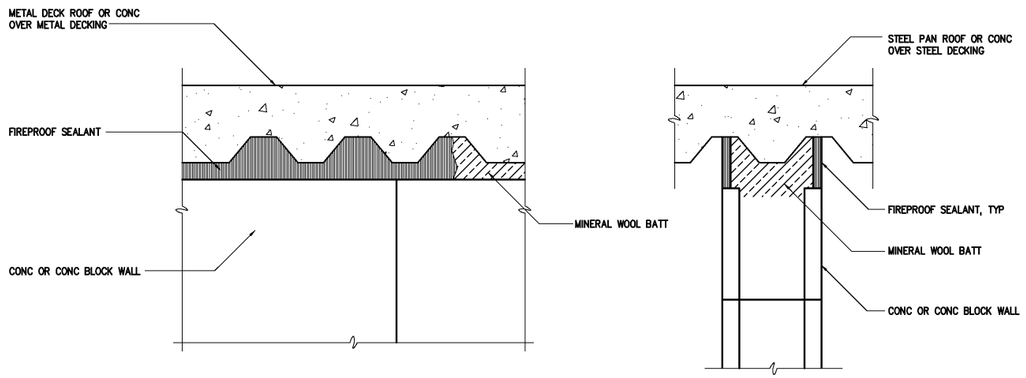
MULTIPLE PIPE / CABLE TRAY THROUGH CMU WALL
UL DESIGN C-AJ-8016

DETAIL	105
NTS	A4



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

DETAIL	106
NTS	A4



PERPENDICULAR CONDITION

PARALLEL CONDITION

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

DETAIL	107
NTS	A4

NO.	ISSUED FOR	DATE	BY
3	AS BUILT	OCT 2007	RLT
2	CONSTRUCTION	MAR 2004	RLT
1	REGULATORY APPROVAL	NOV 2003	RLT

DESIGNED WHR
DRAWN ALB
CHECKED H&S
PROJ. ENGR. H&S
APPROVED

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649

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.

HAZEN AND SAWYER
Environmental Engineers & Scientists
4011 WestChase Blvd, Raleigh, North Carolina 27607

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

PLOT DATE 03/26/04 8:44am FILE= H:\30788\307888\ARCH\a004 by LUNDERWOOD XREF's=misc\arch\wp-a-ds, misc\arch\wp-a-db, misc\arch\wp-a-dc, misc\arch\wp-a-dd, misc\arch\wp-a-de, misc\arch\wp-a-df, misc\arch\wp-a-dh, misc\arch\wp-a-dg, 30788b\misc\307886b,