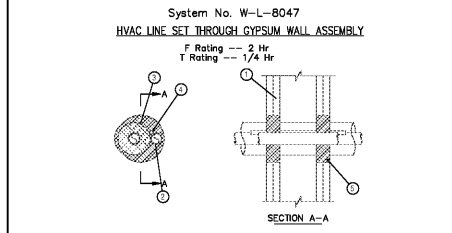
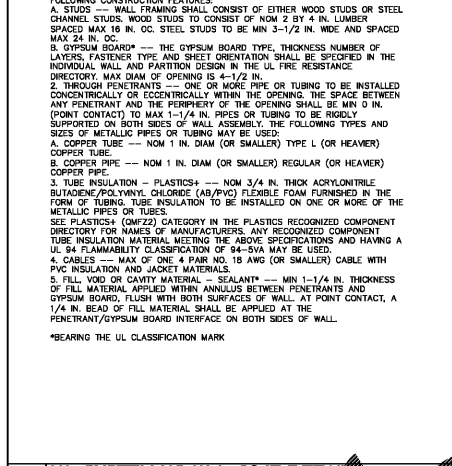


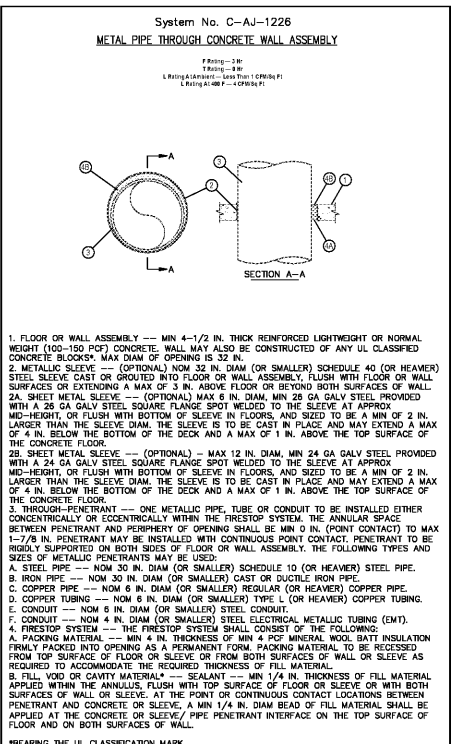
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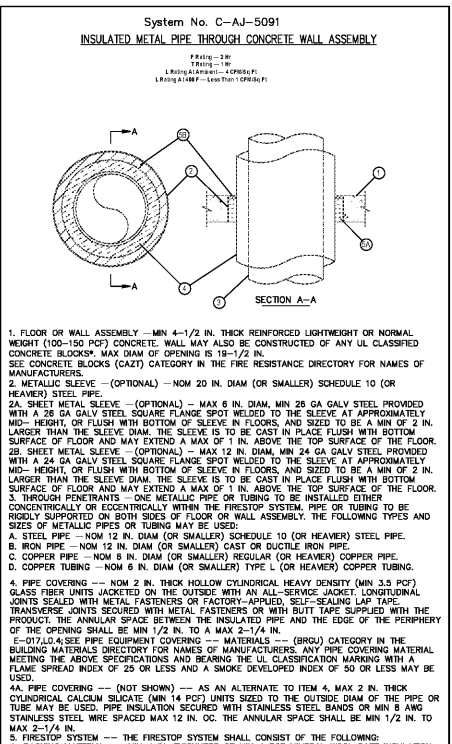
2 UL SYSTEM NO C-AJ-1226 DETAIL
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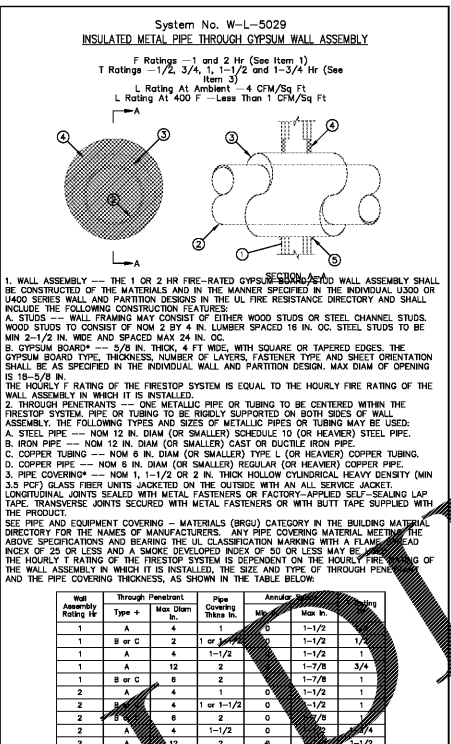
5 UL SYSTEM NO W-L-8047 DETAIL
NO SCALE



2 UL SYSTEM NO C-AJ-1226 DETAIL
NO SCALE



3 UL SYSTEM NO C-AJ-5091 DETAIL
NO SCALE



4 UL SYSTEM NO W-L-5029 DETAIL
NO SCALE

PIPE AND DUCTWORK WALL PENETRATION NOTES (MECHANICAL)

1. ALL INSULATED METAL PIPING PENETRATING A ONE HOUR OR MORE RATED ASSEMBLY SHALL BE SEALED AROUND INSULATION ON BOTH SIDES OF WALL WITH AN APPROVED FIRE STOP WRAP/STRIP MATERIAL. NUMBER OF WRAPS AROUND INSULATION WITHIN WALL OPENING SHALL BE AS REQUIRED FOR THICKNESS OF INSULATION AND MFG RECOMMENDATIONS. COVER EXPOSED SURFACE AND SEAMS WITH AN APPROVED FIRE STOP CAULK ON BOTH SIDES OF WALL.
2. ALL NON-INSULATED METAL PIPING PENETRATING A ONE HOUR WALL OR MORE RATED WALL OR FLOOR SHALL BE SEALED AROUND PIPE ON BOTH SIDES OF WALL WITH AN APPROVED FIRE STOP CAULK. THICKNESS SHALL BE AS RECOMMENDED BY MANUFACTURER FOR WALL RATING REQUIRED TO MAINTAIN U.L. CLASSIFICATION.
3. ALL DUCTWORK PENETRATING A TWO HOUR OR MORE RATED WALL OR FLOOR SHALL BE PROVIDED WITH A FIRE DAMPER INSTALLED AS DETAILED.
4. NO FLEXIBLE DUCTWORK WILL BE ALLOWED TO PENETRATE ONE HOUR WALLS, TWO HOUR WALLS, SMOKE WALLS, CORRIDOR WALLS OR WALLS CLOSED-OFF TO STRUCTURE. METAL RIGID DUCTWORK SHALL EXTEND A MINIMUM OF 5'-0" FROM WALL BEFORE THE FIRST AIR DISTRIBUTION DEVICE IS INSTALLED OR BEFORE FLEXIBLE DUCT IS STARTED. FLEXIBLE DUCTWORK IN A SINGLE DUCT RUN IS ALLOWED ON ONE SIDE OF A RATED WALL BUT NOT BOTH SIDES.
5. ACCEPTABLE MANUFACTURERS OF FIRE STOP MATERIALS ARE AS FOLLOWS:
 - NELSON FLAMESEAL PUTTY+
 - CRUISE-HINDS CABLE BARRIER SYSTEM
 - DOW CORNING FIRE STOP SEALANT/FOAM
 - 3M FIRE BARRIER
 - T&B FLAMESAFE
 - THERMABER BRAND SAFFING
6. ALL MATERIALS AND METHODS SUBMITTED SHALL BE FULLY APPROVED FOR THAT INSTALLATION. TOP DRAWING SUBMITTALS OF MATERIALS AND METHODS FOR INSTALLATION AND FIRE STOP DRAWINGS SHALL BE REVIEWED BY ARCHITECT AND ENGINEER.
7. WHEN A PIPE, PIPE OR DUCT PENETRATES A NON-RATED SMOKE/TIGHT PARTITION, THE MECHANICAL CONTRACTOR SHALL SEAL AROUND ALL PIPES, WIRES AND CONDUITS WITH SEALANT MATERIAL TO MAKE IT SMOKE/TIGHT. SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF THESE PARTITIONS.
8. SEE ARCHITECTURAL DRAWINGS FOR WALL TYPES.
9. ALL RATED WALL PENETRATIONS SHALL BE IN ACCORDANCE WITH UNDERWRITERS LABORATORIES PENETRATION FIRESTOP SYSTEM REQUIREMENTS. ALL MATERIALS USED IN PENETRATION FIRESTOP SYSTEMS SHALL BE APPROVED BY UNDERWRITERS LABORATORIES AND SHALL BE U.L. LABELED.
10. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOORS OF NON-COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH NON-COMBUSTIBLE MATERIALS. PENETRATIONS OF NONRATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH MATERIALS EQUIVALENT TO TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814.

Wall Assembly Rating Hr	Through Penetrant Type + Max Diam	Pipe Covering Thickness In.	Annular Space Min In.	Max In.
1	A	4	1	0
1	B or C	2	1	1-1/2
1	A	4	1-1/2	1-1/2
1	A	12	2	1-7/8
1	B or C	8	2	1-7/8
2	A	4	1	0
2	B or C	4	1	1-1/2
2	B or C	4	1	1-1/2
2	B or C	6	2	0
2	A	4	1-1/2	0
2	B or C	2	0	1-1/2
2	B or C	2	0	1

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MOORE HALL GROUND FLOOR RENOVATION
CULLOWHEE, NC

Principal in Charge: LR
Project Architect: APR
Drawn By: [Name]
Sheet Title: MECHANICAL DETAILS
Sheet No: [Number]
Proj No: 017384
Agency Review D: 17-1742-01A

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