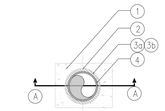
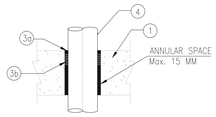
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A. VERTICAL PENETRATIONS.

A.01. FOR NON-METALLIC PIPE UPTO 50mm Dia.



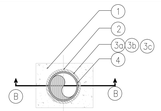
PLAN



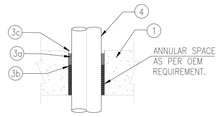
SECTION A-A

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. 1.3 MM THICK INTUMESCENT FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. NON METALIC PIPE – CPVC/PVC/HAPE/PP/ETC

A.02. FOR NON-METALLIC PIPE 50mm – 160MM Dia.



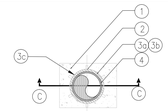
PLAN



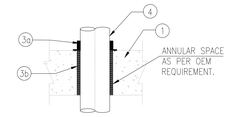
SECTION B-B

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. 1/2/3 LAYER 25/45 MM WIDTH INTUMESCENT FIRE STOP WRAP STRIP WITH INTEGRATED TAPE INSTALLED RECESSED MAX. 6MM.
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
3C. 6MM THICK INTUMESCENT FIRE STOP SEALANT.
4. NON METALIC PIPE – CPVC/PVC/HAPE/PP/ETC

A.03. FOR NON-METALLIC PIPE MORE THAN 160MM – 250MM Dia.



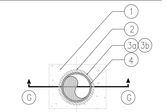
PLAN



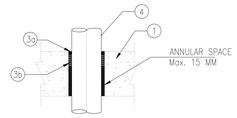
SECTION C-C

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. INTUMESCENT FIRE STOP COLLAR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. NON METALIC PIPE – CPVC/PVC/HAPE/PP/ETC

A.04. FOR METALLIC PIPE ALL DIMENSION.



PLAN

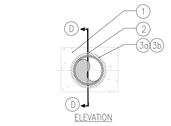


SECTION G-G

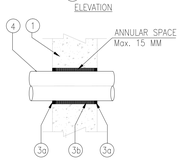
1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. 1.3 MM THICK ACRYLIC FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. NON METALIC PIPE – CPVC/PVC/HAPE/PP/ETC

B. HORIZONTAL PENETRATIONS.

B.01. FOR NON-METALLIC PIPE UPTO 50mm Dia.



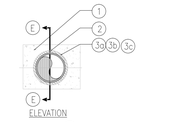
ELEVATION



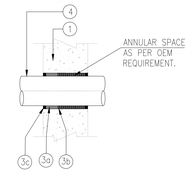
SECTION D-D

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. 1.3 MM THICK INTUMESCENT FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.

B.02. FOR NON-METALLIC PIPE 50mm – 160MM Dia.



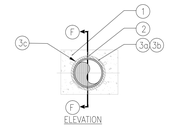
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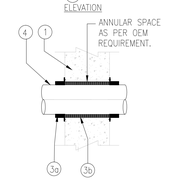
TYPICAL SECTION THROUGH WALL
SECTION E-E

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. 1/2/3 LAYER 25/45 MM WIDTH INTUMESCENT FIRE STOP WRAP STRIP WITH INTEGRATED TAPE INSTALLED RECESSED MAX. 6MM.
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
3C. 6MM THICK INTUMESCENT SEALENT.

B.03. FOR NON-METALLIC PIPE MORE THAN 160MM – 250MM Dia.



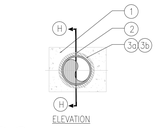
ELEVATION



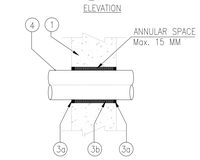
SECTION F-F

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. INTUMESCENT FIRE STOP COLLAR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.

B.04. FOR METALLIC PIPE ALL DIMENSION



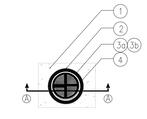
ELEVATION

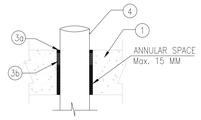


SECTION H-H

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE ONE SIZE HIGHER THAN PIPE SIZE/AS PER FIRE SEALANT OEM REQUIRMENT
3a. 1.3 MM THICK ACRYLIC FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.

E.01. FOR SINGLE ELECTRICAL CABLE

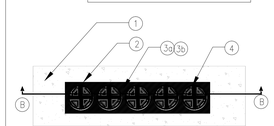


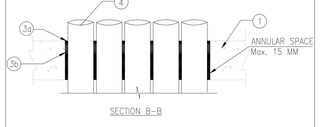


SECTION A-A

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE
3a. 1.3 MM THICK INTUMESCENT FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. ELECTRICAL CABLE

E.02. FOR MULTIPLE ELECTRICAL CABLE

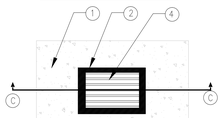


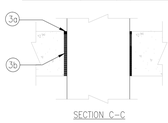


SECTION B-B

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. BOXOUT
3a. 1.3 MM THICK INTUMESCENT FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. ELECTRICAL CABLE

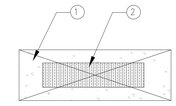
E.03. FOR ELECTRICAL BUSDUCT



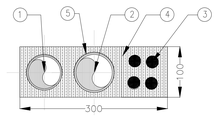


SECTION C-C

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. BOXOUT
3a. 1.3 MM ACRYLIC BASED SEALANT
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. ELECTRICAL BUSDUCT

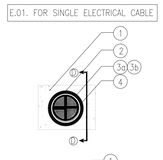


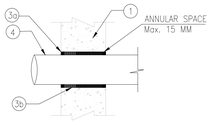
1. AREA TO BE FILLED CEMENT BY OTHER.
2. MEP SERVICES WITH FIRE SEALANT BY RESPECTIVE M/E/P CONTRACTOR



1. ø80mm SPRINKLER PIPE
2. ø110mm WASTE PIPE
3. ELECTRICAL CABLE
4. 1.3 MM THICK INTUMESCENT FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
5. INTUMESCENT WRAP

E.01. FOR SINGLE ELECTRICAL CABLE

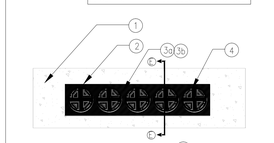


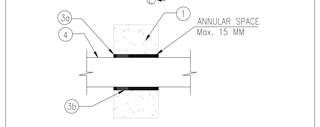


SECTION D-D

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. PVC SLEEVE
3a. 1.3 MM THICK INTUMESCENT FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. ELECTRICAL CABLE

E.02. FOR MULTIPLE ELECTRICAL CABLE

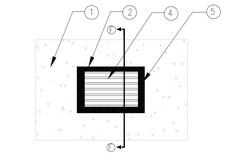


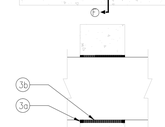


SECTION E-E

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. BOXOUT
3a. 1.3 MM THICK INTUMESCENT FIRE STOP SEALANT FLUSH WITH THE TOP SURFACE OF FLOOR
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. ELECTRICAL CABLE

E.03. FOR ELECTRICAL BUSDUCT





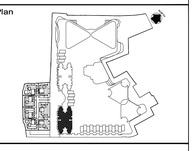
SECTION F-F

1. CONCRETE TO REDUCE THE SHAFT OPENING.
2. BOXOUT
3a. 1.3 MM ACRYLIC BASED SEALANT
3b. PACKING MATERIAL – MIN 1.3MM THICK OF 64 KG/M3 MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO ANNULAR SPACE.
4. ELECTRICAL BUSDUCT
5. MAXIMUM WIDTH 10-50MM

Professional Seals

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS
2. DO NOT SCALE THIS DRAWING. FOR DIMENSIONS & ORIENTATION REFER ARCHITECT'S DRAWING.
3. FIRE SEALANT DETAIL SHALL BE AS PER SPECIALIST VENDER DETAIL.

Key Plan



TENDER

Status of drawing

Rev	Description	Date	Drn	Chk
R3	ISSUED FOR TENDER ADDENDUM 3	30.09.16	VP	RP
R2	ISSUED FOR TENDER ADDENDUM 2	09.08.16	VP	RP
R1	ISSUED FOR TENDER ADDENDUM 1	15.07.15	VP	RP
R0	ISSUED FOR TENDER	08.04.14	AR	RP

Client: LODHA GROUP
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MEP Consultant: BUROHAPPOLD ENGINEERING

Project: WORLI TOWER GAMMA
MUMBAI, INDIA

Drg Title: FIRE PROTECTION
TYPICAL DETAILS

Scales@A0: 1:100
Drawn by: AR
Checked by: RP
Date: 30.09.2016

Job No.: 031247
Drawing No.: T1-FP-503
Rev: R3