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Policy Letter No 22 /2012
Directorate General Married
Accommodation Project (DG MAP)

Engineer-in-Chief's Branch,
Integrated HQ of MoD (Army)
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21379/Spec Ph-III/P&S/21/MAP
(All PMs & DEPMCs)

13 Jul 2012

## **SPECIFICATIONS: SOIL WASTE AND VENT PIPES**

- 1. Refer this Headquarters letter No 21378/Vendor PH-III/P&S/03/MAP dt 29 Jun 2012.
- 2. Given in the succeeding sub paragraphs are the specifications for Soil waste and vent pipes for the future projects of MAP Phase-II & Phase-III:-

## (a) For buildings upto G+3 Configuration

- (i) General location of soil, waste, vent anti syphonage pipes are indicated in the drawings. Detailed layout shall be marked on the walls in coloured chalk and approved by PM before execution of work. All soil, waste, vent and anti syphonage pipes including fittings shall be of cast iron spigot and socket centrifugally cast pipes conforming to IS-3989. Jointing shall be done with lead caulked joints except vent pipes fittings which shall be jointed with cement joints. The pipes and fittings shall be either without ears or with ears. All other specifications regarding materials and workmanship shall be as per Clause 18.23 and 18.67 on Page No. 357 & 382 of MES Schedule (Part- I): 2009 respectively.
- (ii) The vent pipes shall be taken from soil pipes to a height to 200 cms, height measured from top of roof (of last storey) to the bottom of the cowl. CI cowl shall be provided on top of vent pipes and shall be fixed with cement joints.
- (iii) Soil pipes shall be taken upto 45 cms below ground level and provided with ducks foot bend. Soil/drain pipes from ducks foot bend shall be cast iron up to first manhole and waste pipe from gully traps shall be of Glazed stone ware pipes conforming to IS upto first manholes. The waste pipe shall be taken up to 15 cm below plinth protection level and provided with ducks foot bend.
- (iv) All exposed cast iron bends /branches and other junctions shall be provided with oval pattern access doors with bolts as per relevant IS and 3 mm rubber insert packing to make them air and water tight.
- (v) The branch connection with the vertical pipes shall be so arranged that the vertical pipe is at least 5 cm away from the face of the wall. It should also be ensured that no joint between branch piece and vertical pipe terminates. Irrespective of what is shown on drawings, separate stacks for soil, waste and anti syphonage pipe shall be provided.

(vi) Irrespective of what is shown on drawings, sizes of cast iron pipes shall be as follows:

(a) Soil pipes - 100 mm dia (bore)

(b) Waste pipes - 75 mm dia (bore)

(c) Anti syphonage pipes & vent pipes - 50 mm dia (bore)

(vii) Floor Trap: Floor trap shall conform to IS-3980 and shall be of cast iron with Stainless steel grating (of approved make) and outlet with nominal diameter of 75 mm shall be provided in the situations where shown on drawings. The outlet of floor trap shall be with long arm and shall be jointed to connecting pipe / branch pieces with lead joint. Floor trap shall be provided in lieu of nahani trap wherever shown / specified on drawings. Provisions of IS-5329, code of practice for sanitation pipe works for above ground for buildings be adhered to. Long arm P/S trap for floor/Nahani trap shall be used to minimize the joints up to vertical pipe stack.

## (b) For buildings of G+4 configuration and above:

- (i) All soil, waste vent and antisyphonage pipes including fittings shall be UPVC (SWR). The pipe fitting, laying and jointing shall be done all as specified in clause 18.67.7A on page 382 of SSR Part-I and as per manufacturers instructions. All soil and waste pipes with rubber ring joints shall be type B and antisyphonage pipes & vent pipes shall be type 'A' marked ISI 13592. All fittings shall be UPVC injection moulded fittings for soil and waste discharge system, ISI marked (IS-14735)
- (ii) The vent pipes shall be taken from soil pipes to a height to 30 cms, height for inaccessible roof and 2 m above in case of accessible roof measured from top of roof (of last storey) to the bottom of the cowl. Cowl shall be provided on top of vent pipes and shall be fixed with solvent supplied by the manufacturer. Soil pipes shall be taken upto 45 cms below ground level and provided with ducks foot bend.
- (iii) Soil/drain pipe from ducks foot bend shall be of UPVC (SWR) up to first manhole and waste pipe form gully traps shall be of GSW pipe conforming to IS upto manholes.

The waste pipe shall be taken upto 15 cm. below plinth protection level and provided with oval pattern access doors with ducks foot bend.

- (iv) All exposed bends / branches and other junctions shall be provided with oval pattern access doors with bolts as per relevant IS and 3 mm rubber insert packing to make them air and water tight.
- (v) The branch connections with the vertical pipes shall be so arranged that the vertical pipe is at least 5 cm away from the face of the wall. It should also be ensured that no joint between branch piece and vertical pipe terminates. Irrespective of what is shown on drawings, separate stacks for soil, waste and antisyphonage pipes shall be provided.

Irrespective of what is shown on drawings, sizes of pipes shall be as follows:-

(a) Soil pipes - 110mm bore

(b) Waste pipes - 110mm bore

(c) Antisyphonage pipes & vent pipes - 75mm bore

(vi) <u>Floor Trap:</u> Floor trap shall be of UPVC (SWR) and outlet with nominal diameter of 75mm shall be provided in the situations where shown on drawings. The outlet of floor trap shall be jointed to connecting pipe / branch pieces with solvent supplied by the manufacture. Floor shall be provided in lieu of nahani trap wherever shown / specified on drawings.

(JS Sodhi) Lt Col SO 1 (P&S) for DG MAP

## Internal

Team 'A' - for necessary action please

Team 'B' - -do-

Contract Section Team 'A' - -do-

Contract Section Team 'B' - -do-

Arch Section - -do-