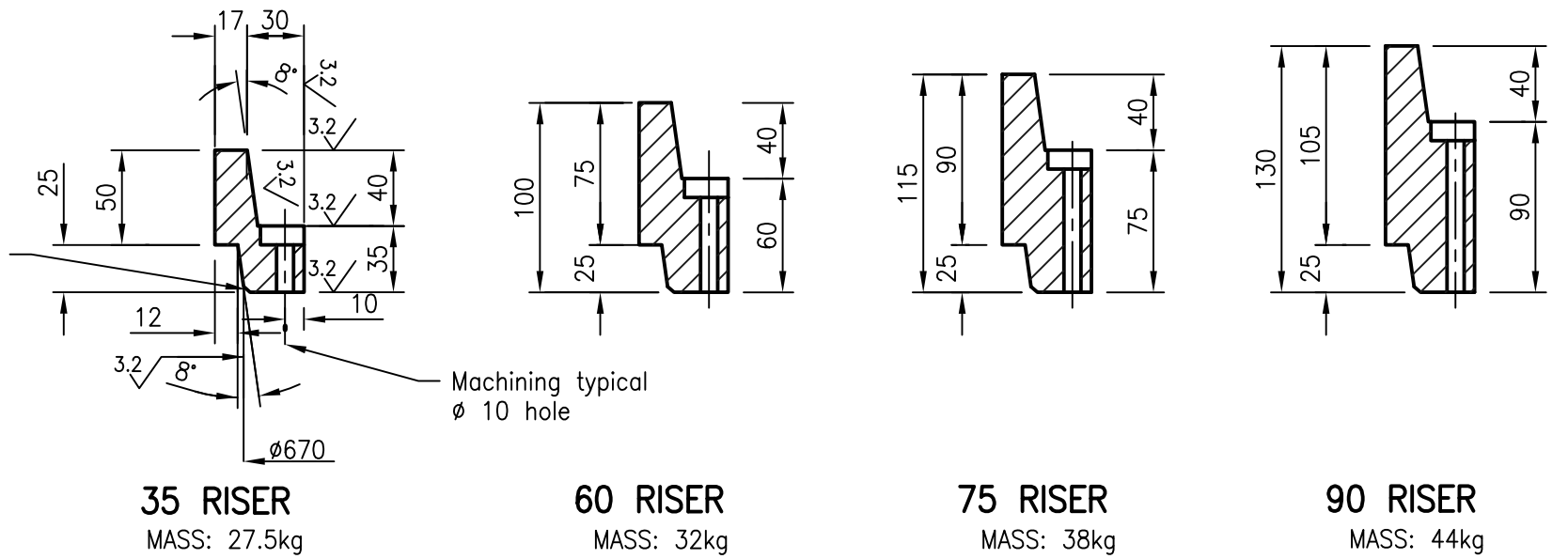
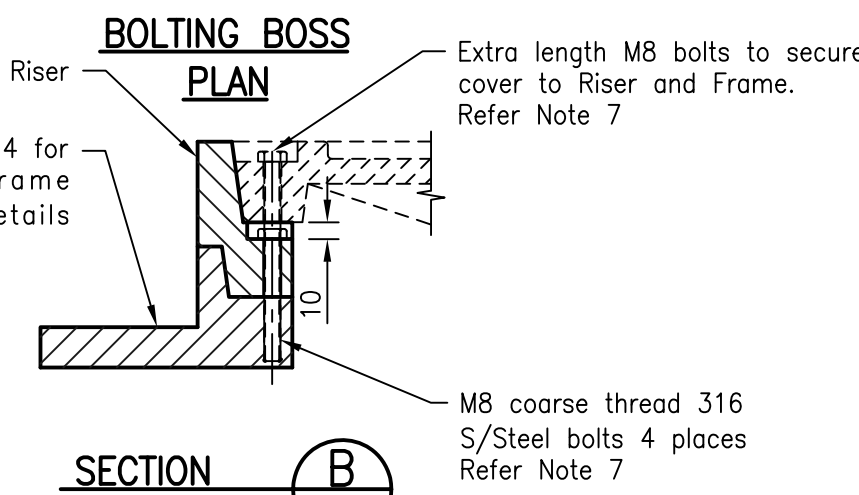
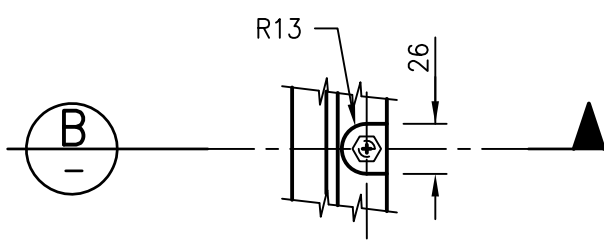


Bolt hole and boss.
Gauge shall be used to check PCD and tapped hole position



RISER DETAILS
(Refer to 35 riser for typical dimensions for all risers)



NOTES:

- All edges to be square.
- Casting to be free of burrs and pits.
- Material**
Ductile cast iron
Tensile strength : 600-3 (AS 1831)
Hardness : 145-185 (HB)
Design load = 210kN (AS 3996)
Mass = varies
- Tolerances**
Cast size ± 1.00mm
Angle profile ± 0.25°
Machined size ± 0.125mm
Overall diameter of cover +0mm-0.25mm
DFT of coating 50 µm
- Machine surface symbol: 3.2
- All machined surfaces shall have a coating approved as fit for the purpose of providing a rust proof, non stick and gas/water proof joint.
- Four (4) M8 Course Thread Stainless Steel Bolts must be supplied and used to fix riser to frame, where cover is required to be bolted down, min two extra length bolts must be used to secure cover and raiser to frame, with two remaining bolts securing riser to frame. Refer TABLE 1 for bolt Lengths
- Refer Std Dwg DS-015 for manhole frame details.
- Refer Std Dwg DS-019, DS-020 and DS-021 for manhole cover details.
- All dimensions are in millimetres unless shown otherwise.

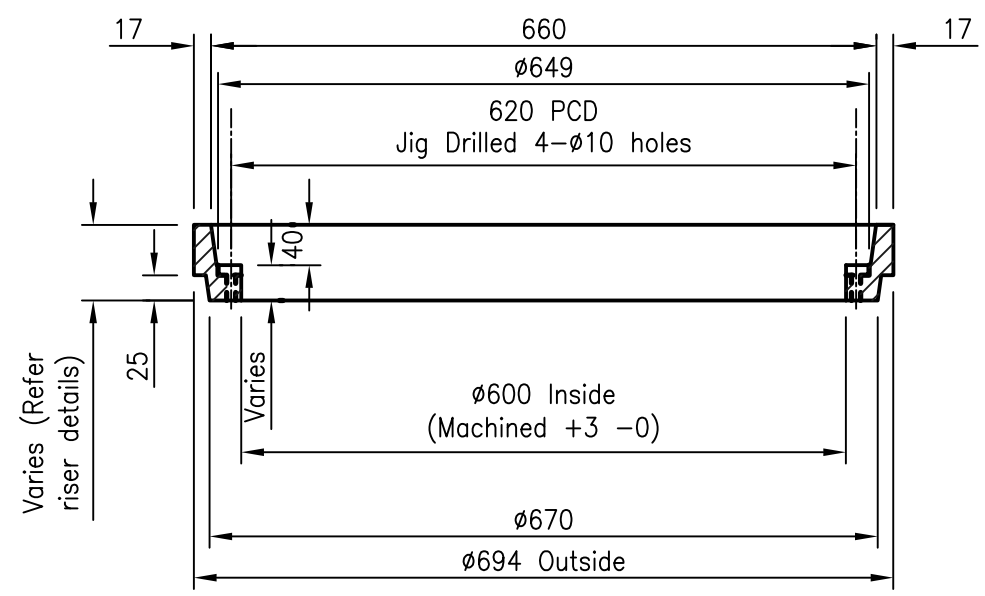


TABLE 1

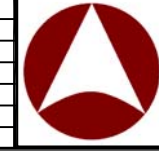
RISER HEIGHT	BOLT LENGTH	
	FOR RISER ONLY	FOR RISER WITH COVER
35	60	100
60	90	130
75	110	150
90	115	160

TYPICAL ASSEMBLY

Bolts: 60 long for 35 riser
90 long for 60 riser
110 long for 75 riser
115 long for 90 riser

These drawings have been developed in consultation between the participating Councils.
BEFORE USE, the user shall confirm that the drawing has been adopted by the appropriate Council.

Rv.	DATE	REVISIONS
C	06/14	Review
B	03/14	Amended Drawing Number
A	10/12	ORIGINAL ISSUE



INSTITUTE OF PUBLIC WORKS ENGINEERING AUSTRALASIA
STANDARD DRAWINGS

MANHOLE RISER DETAILS
(ROADWAY)

DS-018

C
B
A
Rv.