3H.1.4.3.2.3 RPV Pedestal

The RPV pedestal experiences the same loads and loading combinations as the RCCV. The loading combinations shown in Subsection 3H.1.4.3.2.1 for RCCV will also be used for the pedestal evaluation. The acceptance criteria are as per AISC for the steel components with allowable stresses limited to 0.9 Fy for factored loads. For the concrete portion of the pedestal, which is considered only to resist compressive loads, ACI 349 Code shall be used for acceptance criteria.

3H.1.4.3.2.4 Reactor Building (R/B) Concrete Structures Including Fuel Pool Girders

The loading combinations, as selected from Table 3.8-1, for the Reactor Building concrete structures including fuel pool girders are given in Table 3H.1-5b.

3H.1.4.4 Materials

3H.1.4.4.1 Concrete

- Concrete for the RCCV and the R/B including basemat and reactor well shield plugs shall have compressive strength, f'c = 2.76E+04 kPa, modulus of elasticity, E = 2.49E+07 kPa, Poisson's ratio, μ = 0.2, and shear modulus, G = 1.04E+07 kPa
- Concrete fill in the pedestal; f'c = 2.76E+04 kPa, E= 2.49E+07 kPa, μ = 0.2, and G = 1.04E+07 kPa.
- Concrete fill in the shield wall; f'c = 2.76E+04 kPa, E= 2.49E+07 kPa, μ=0.2, and G= 1.04E+07 kPa.

3H.1.4.4.2 Reinforcing Steel

Reinforcing steel shall be deformed billet steel conforming to ASTM A-615 grade 60. Minimum yield strength, Fy = 4.14E+05 kPa.

3H.1.4.4.3 Liner Plate

- Liner plate for RCCV in the wetted area shall be stainless steel conforming to ASME SA-240, Type 304L.
- Liner plate for the RCCV in the non-wetted area shall be 6.35 mm thick and conform to ASME SA-516 GR. 70.
- Liner Anchors: ASTM A-633 GR. C.
- Stainless steel cladding to conform to ASME SA-264.

3H.1.4.4.4 Other Materials

Other materials shall conform: