* MEMBER NAME : ST01
  1. General Information
     1. Design Code : ACI318M-11
     2. Unit System : N, mm
  2. Design Data
     1. Material
        + : 24.00MPa
        + : 400MPa
        + : 400MPa
     2. Design Load
        + DL (Stair) : 2.000kN/m²
        + DL (Landing) : 3.000kN/m²
        + Live Load : 4.000kN/m²



* + 1. Support : By Others(Wall or Beam)
       - Left : Fix(1.000)
       - Right : Fix(1.000)
    2. Thickness
       - Stair : 250mm
       - Landing : 150mm
       - Cover : 20.00mm
    3. Length
       - Landing(Left) : 3.000m
       - Landing(Right) : 2.500m
       - Stair : 3.000m
    4. Size
       - Height : 2.000m
       - Width : 3.000m
  1. Calculate Design Load
     1. Stair
        + 8.800kN/m²
     2. Landing
        + 10.000kN/m²
  2. Moment Diagram



* 1. Shear Force Diagram



* 1. Check Stair
     1. Rebar
        + Top : #5@100
        + Bottom : #3@100
     2. Check Design Force Section-I
        + -44.46kN·m/mm
        + 64.40kN·m/mm (ø=0.852)

0.690 → O.K

* + - * -36.76kN/mm
      * 75.25kN/mm (ø=0.750)

0.489 → O.K

* + 1. Check Rebar Space (Crack, Section-I)
    2. Check Design Force Section-M
       - 40.79kN·m/mm
       - 54.55kN·m/mm (ø=0.900)

0.748 → O.K

* + 1. Check Rebar Space (Crack, Section-M)
    2. Check Design Force Section-J
       - -58.11kN·m/mm
       - 64.40kN·m/mm (ø=0.852)

0.902 → O.K

* + - * 49.96kN/mm
      * 75.25kN/mm (ø=0.750)

0.664 → O.K

* + 1. Check Rebar Space (Crack, Section-J)