* 1. General Information
     1. Design Code : IS456:2000
     2. Unit System : N, mm
  2. Design Data
     1. Material
        + : 25.00MPa
        + : 415MPa
        + : 415MPa
     2. Design Load
        + DL (Stair) : 6.000kN/m²
        + DL (Landing) : 5.000kN/m²
        + Live Load : 3.000kN/m²



* + 1. Support
       - Left : Fix(1.000)
       - Right : Fix(1.000)
    2. Thickness
       - Stair : 150mm
       - Landing : 150mm
       - Cover : 20.00mm
    3. Length
       - Landing(Left) : 3.000m
       - Landing(Right) : 3.000m
       - Stair : 3.000m
    4. Size
       - Height : 2.000m
       - Width : 3.000m
  1. Calculate Design Load
     1. Stair
        + 12.00kN/m²
     2. Landing
        + 10.80kN/m²
  2. Moment Diagram



* 1. Shear Force Diagram



* 1. Check Stair
     1. Rebar
        + Top : #5@100
        + Bottom : #4@100
     2. Check Design Force Section-I
        + -87.17kN·m/mm
        + 64.40kN·m/mm

1.354 → N.G

* + - * -54.03kN/mm
      * 73.27kN/mm (ø=0.750)

0.737 → O.K

* + 1. Check Rebar Space (Crack, Section-I)
    2. Check Design Force Section-M
       - 42.55kN·m/mm
       - 48.61kN·m/mm (ø=0.900)

0.875 → O.K

* + 1. Check Rebar Space (Crack, Section-M)
    2. Check Design Force Section-J
       - -87.17kN·m/mm
       - 64.40kN·m/mm (ø=0.852)

1.354 → N.G

* + - * 54.03kN/mm
      * 73.27kN/mm (ø=0.750)

0.737 → O.K

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