

บทที่ ๖
แผ่นแสดงการคำนวณออกแบบตงไม้

JOIST NUMBER J 1

SPAN OF FLOOR JOIST 3.00 M.

JOIST SPACING 0.50 M.

WEIGHT OF FLOOR 50 KG/SQ M.

LIVE LOAD 150 KG/SQ M.

WEIGHT OF PARTITION 100 KG/M.

ALLOWABLE BENDING STRESS 150 KG/SQ CM.

$MJ = 0.125 \times 200 \times 3.00 \times 3.00 = 225 \text{ KG} - \text{M}.$

JOIST LOAD 200 KG/M.

TRY B = 1 ½ IN. = 3.75 CM.

$DD = 6 \times 225 \times 100 / 150 / 3.75 = 240.00 \text{ SQ CM}.$

DEPTH D = 15.49193 CM.

USE FLOOR JOIST 1 ½ × 6 INCHES

บทที่ ๗

แผ่นแสดงการคำนวณออกแบบคานไม้

BEAM NUMBER B 1

SPAN OF FLOOR BEAM 4.00 M.

SPAN OF FLOOR JOIST 3.00 M.

WEIGHT OF FLOOR 50 KG/SQ M.

WEIGHT OF PARTITION 100 KG/M.

LIVE LOAD 150 KG/SQ M.

BEAM LOAD 400 KG/M.

ALLOWABLE BENDING STRESS 150 KG/SQ CM.

$MB = 0.125 \times 400 \times 4.00 \times 4.00 = 800$ KG-M.

TRY $B = 2$ INCHES = 5.00CM.

$DD = 6 \times 800 \times 100 / 150 / 5.00 = 640.00$ SQ CM.

DEPTH $D = 25.29822$ CM.

USE FLOOR BEAM 2×10 INCHES