DOWEL INTO WOOD ANALYSIS

INPUTS

SHEAR STRESS

R_u = 111.66

ADJUSTMENT FACTORS

C_D = 1.6 (LOAD DURATION FACTOR)

C_M = 1 (WET SERVICE FACTOR)

C_t = 1 (TEMPERATURE FACTOR)

DOWEL FASTENER SIZE

D = 0.25 in

CENTER TO CENTER SPACING

S = 2 in

WOOD FASCIA SIZE 2x6 SYP

b_f = 1.5 in d_f = 5.25 in

END DISTANCE

d_e = 1 in

END GRAIN FACTOR

C_{eg} = 1 in

DIAPHRAGM FACTOR

C_{di} = 1 in

TOE NAIL FACTOR

C_{tn} = 1 in

LOAD ANGLE

θ = 90 deg

OUTPUTS

YIELD MODE	CAPACITY
I_m	384.54484501751904
I_s	190
II	170.6302369409794
III_m	276.50468089809675
III_s	241.01795602035006
IV	340.8487038307154
Z'=	273.0083791055668
R_u/Z'=	0.4089984357469971