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American Wood Council
Engineered and Traditional Wood Products

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2002 ERRATA/ADDENDUM

to

2000 Edition of

LRFD Solved Example Problems for Wood Structures

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Errata – 4/10/2002
LRFD Solved Example Problems for Wood Structures
Cramer and Wheat

Problem No.	Page	Error	Correction	Net Result of Correction
2	7	Fg is not wet use	Replace 2.93 ksi with 2.66 ksi	Strength is controlled by compression, P_u = 33.0 kips
2	9	Fg is not wet use	Updated Fg earlier in sheet	No major change
5	20	Section properties are not based on Table 5.2 in Lumber Supplement as stated	Section props based on Table 8.1 in Lumber Supplement	No change to numerics of the solution
6	25	Section properties are not based on Table 5.2 in Lumber Supplement as stated	Section props based on Table 8.1 in Lumber Supplement	No change to numerics of the solution
8	42-44	Errors in converting ASD values to LRFD	Phi = 0.85 should be used. F_b = 4.701 ksi F_v = 0.889 ksi	Required S_x is controlled by deflection
9	47	Section properties are not based on Table 5.2 in Lumber Supplement as stated	Section props based on Table 8.1 in Lumber Supplement	No change to numerics of problem
12	63	Errors concerning use of the 20” oc sheathing	20” oc sheathing fails in flexure but ok in shear	Should not use 20” cc sheathing
13	67	Error in note on load case 1.3-6 concerning “not including wind”	Wind and earthquake loading are included in the load combination.	This combo will not control. This load combo is intended for overturning.
13	70	Need to include C_F near top of page and C_{fu} near bottom of pg.	C_F = 1.1 from Table 4.3 and C_{fu} = 1.1 from lumber supplement	Section is now inadequate
13	72	Shear force resulting from factored wind load is incorrect	$V_u = Wind_{factored} * Length$	Factored shear resistance remains greater than shear load
14	77-78	Same errors as on pgs. 70 and 72	C_F = 1.1 from Table 4.3 and C_{fu} = 1.1 from lumber supplement	Max wind load is reduced
15	82	Printed I_y value should be 229.17 in^4	Correct value was used in computation	No change.
15	83	Need explanation in using 15% to justify actual MC.		15% is an estimate of MC at time of erection.
16	91	Net area should be used in finding the capacity	Capacity = 11.91 kips instead of 12.83 kips listed	OSB will control the design
17	95	Error referring to Sect. 7.4.3.2	Should be 7.3.4.1	Single shear instead of Double shear.
17	97	Need to recomputed K_D and C_d in calcs at bottom of pg.	K_D = 2.75 and C_d = 0.93, $\lambda\varphi_z Z'$ = 0.445 kips, 3.51 spikes required	No change as still need 4-20d spikes.

18	102	Heading cut off	Full heading: **Lateral capacity of the joint LRFD Standard Section 7.4 Single-shear - Table 7.4-1**	No major change
19	111	Error in net area at top of pg. Lead hole dia. not included in net area.	Bolt dia. Should be 1 + 1/16-in. The net area will be 13.69 in^2	No major change but P_{max} should be 12.4 kips rather than 12.6 kips.
23	141	E should be E_x E_{05} should be E_{y05}	E_x = 1700 ksi E_{y05} = 1300 ksi	See next item on pg. 145
23	145	Same as above	C_L changes slightly	Volume factor controls so no change to problem
29	181	Need C_E in P_{ex} calc.	No attachment scheme identified in problem statement, C_E=1	No change
32	196	Need to add grade to problem statement.	Use 16F-V5 Southern Pine Glulam	No major change
32	198	Need to add self weight of beam to loads.	Not changed.	Glulam self weight is very significant in this problem and will dramatically increase the stresses.
32	199	Have included $\lambda\varphi$ twice in shear resistance. Need to delete one.	Factored shear resistance = 16.64 kips	Shear does not control so no major change
37	224	Error in calc at top of page	$unit_{shear}$ should be replaced with $requiredunit_{shear}$ for use in MathCad	Required number of nails is 16.6 or 17 nails as stated
37	224	Need to change the nailing diagram at the bottom of the page	Nailing schedule changes for Type I from 11,11,8 and 8 nails to 12,12,12, 12. For the Type II, change from 14 to 17 nails on the outside of wall B.	The figure at the bottom of pg. 224 changes with the new numbers of nails.