

MASONRY Laboratory Website

Lab 3 – Evaluation of Bond Strength

Lab

[Four-Point Bending Test](#)

[Bond Wrench Test](#)

Extras

[Lab Handout](#)

[Sample Results](#)

[Sample Lab Report](#)

[Photos](#)

[Lab Equipment and Materials](#)

[Extra Resources](#)

[Lab Worksheet](#)

Modulus of Rupture

Group	Load lbs (N)	Group	Load lbs (N)
PCL 1	663 (2950)	MC 1	472 (2100)
PCL 2	499 (2220)	MC 2	525 (2340)
PCL 3	540 (2400)	MC 3	466 (2070)
PCL 4	354 (1580)	MC 4	426 (1900)
PCL 5	497 (2210)	MC 5	641 (2850)
		MC 6	513 (2280)

Note: $a=5.25$ in (133 mm), $I=30.27$ in⁴ (12599325 mm⁴) and $c=1.81$ in (46.0 mm)

Bond Wrench

Group	Load lbs (N)	Group	Load lbs (N)
PCL 1	175 (778)	MC 1	180 (801)
PCL 2	200 (890)	MC 2	140 (623)
PCL 3	150 (667)	MC 3	220 (979)
PCL 4	190 (845)	MC 4	190 (845)
PCL 5	215 (956)	MC 5	205 (912)
PCL 6	220 (979)	MC 6	200 (890)
PCL 7	190 (845)	MC 7	150 (667)
PCL 8	160 (712)	MC 8	200 (890)
PCL 9	230 (1020)	MC 9	200 (890)
PCL 10	170 (756)	MC 10	170 (756)
PCL 11	180 (801)	MC 11	180 (801)

		PCL 12	140 (623)	MC 12	110 (489)
		PCL 13	260 (1160)	MC 13	140 (623)
		PCL 14	160 (712)	MC 14	190 (845)
				MC 15	150 (667)
		Note: $la=14$ in (356 mm), $lb=2$ in (51mm), $warm=8.95$ lb (4.06 kg), $wbrick=3.6$ lb (1.63 kg), $I=30.27$ in ⁴ (12599325 mm ⁴) and $c=1.81$ in (46.0 mm)			
Home University of Wyoming RMMI PCA NCMA TMS					