

Table 1: Maximum lateral load capacity and the corresponding drifts of the specimens in the repaired and virgin states

Specimen	Negative direction		Positive direction		Negative direction	Positive direction
	F_p^- (kN)	d_p^- (%)	F_p^+ (kN)	d_p^+ (%)	Increase in peak load	
JPA3-R	-38.0	-1.65	+40.9	+1.65		
JPA3	-41.9	-2.31	+43.3	+2.60	-9.3%	-5.5%
JPB-R	-52.7	-1.62	+57.14	+2.33		
JPB	-35.4	-1.99	+39.55	+2.24	+48.9%	+44.5%

Table 2: Maximum bending moments developed in the beams of the repaired and the virgin specimens.

Specimen	Negative direction		Positive direction		Negative direction		Positive direction	
	Absolute values				Variation			
	M_L^+	M_R^-	M_L^-	M_R^+	M_L^+	M_R^-	M_L^-	M_R^+
	(kN.m)	(kN.m)	(kN.m)	(kN.m)				
JPA3-R	+65.94	-39.6	-43.04	+71.17				
	(-1.64)*	(-1.64)	(+1.65)	(+2.65)				
JPA3	+75.85	-40.16	-39.84	+79.95	-13.07%	-1.39%	+8.03%	-10.98%
	(-2.32)	(-2.32)	(+2.59)	(+2.59)				
JPB-R	+108.81	-57.16	-55.64	+107.46				
	(-2.62)	(-1.62)	(+1.66)	(+2.33)				
JPB	+69.68	-31.87	-34.30	+75.78	56.16%	79.35%	62.22%	41.81%
	(-4.0)	(-1.99)	(+2.58)	(+2.44)				

* Values in parentheses indicate the corresponding drift in percentage at maximum bending moment.

Table 3: Data for the evaluation of displacement ductility factor

Specimen	Negative direction		Positive direction		μ_Δ	$\left(\frac{\mu_\Delta^R - \mu_\Delta^V}{\mu_\Delta^V} \right)$
	d_y^- (mm)	d_u^- (mm)	d_y^+ (mm)	d_u^+ (mm)		
JPA3-R	-22.5 (-0.75)*	-79.2 (-2.64)	+16.5 (+0.55)	+102.9 (+3.43)	4.88	+56%
JPA3	-34.5 (-1.15)	-110.5 (-3.68)	+34.5 (+1.15)	+105.2 (+3.51)	3.13	
JPB-R	-25.5 (-0.85)	-93.3 (-3.11)	+31.5 (+1.05)	+97.2 (+3.24)	3.37	+12 %
JPB	-34.5 (-1.15)	-87.6 (-2.92)	+31.5 (+1.05)	+108.9 (+3.63)	3.00	

* Values in parentheses indicate the corresponding drift in percentage at maximum bending moment.