

C5b

Earthquake Test Results

01 Test Setup

02 Displacement from Lateral Loads

03 EVDR

04 Load Tests

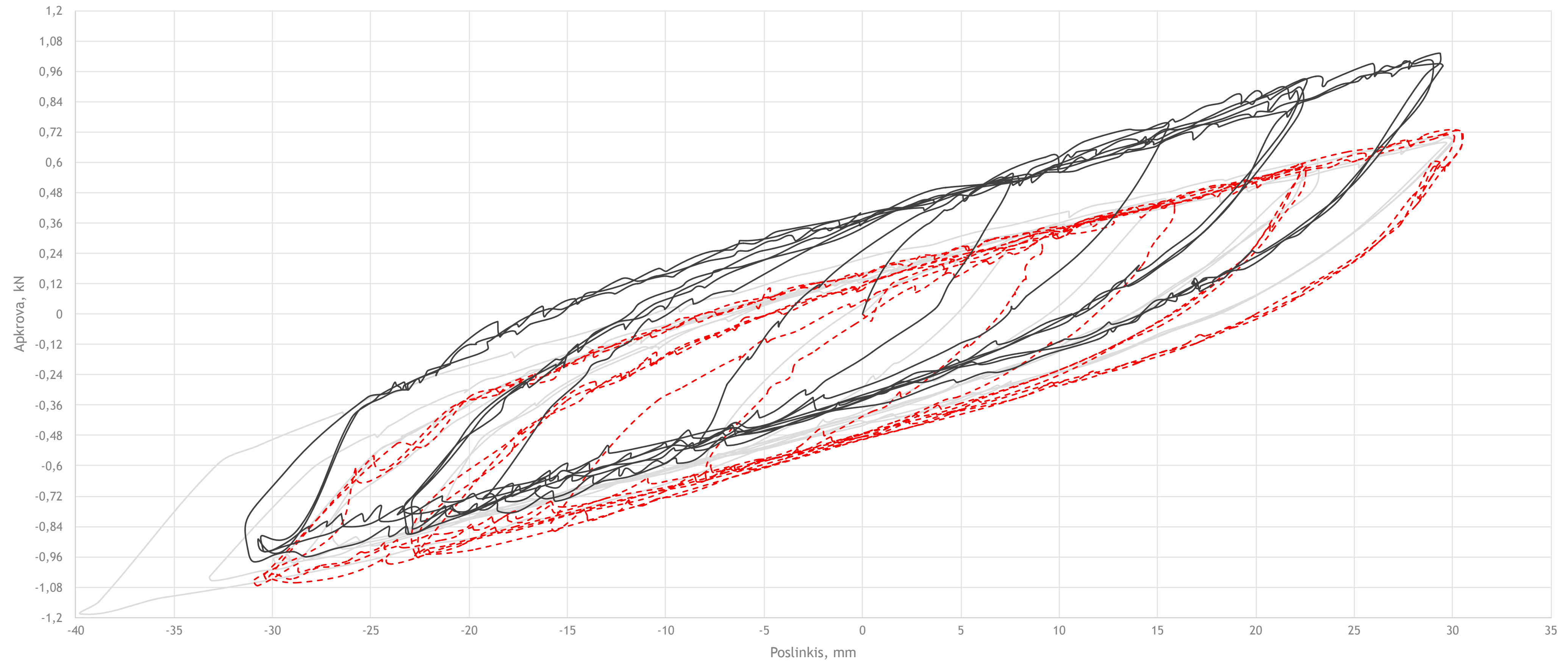
Earthquake tests

Quasi-static cyclic loading was applied in both cases. For non-braced panel (left) and braced panel (right).



Earthquake tests: Non-braced panel

Poslinkis nuo horizontalios apkrovos



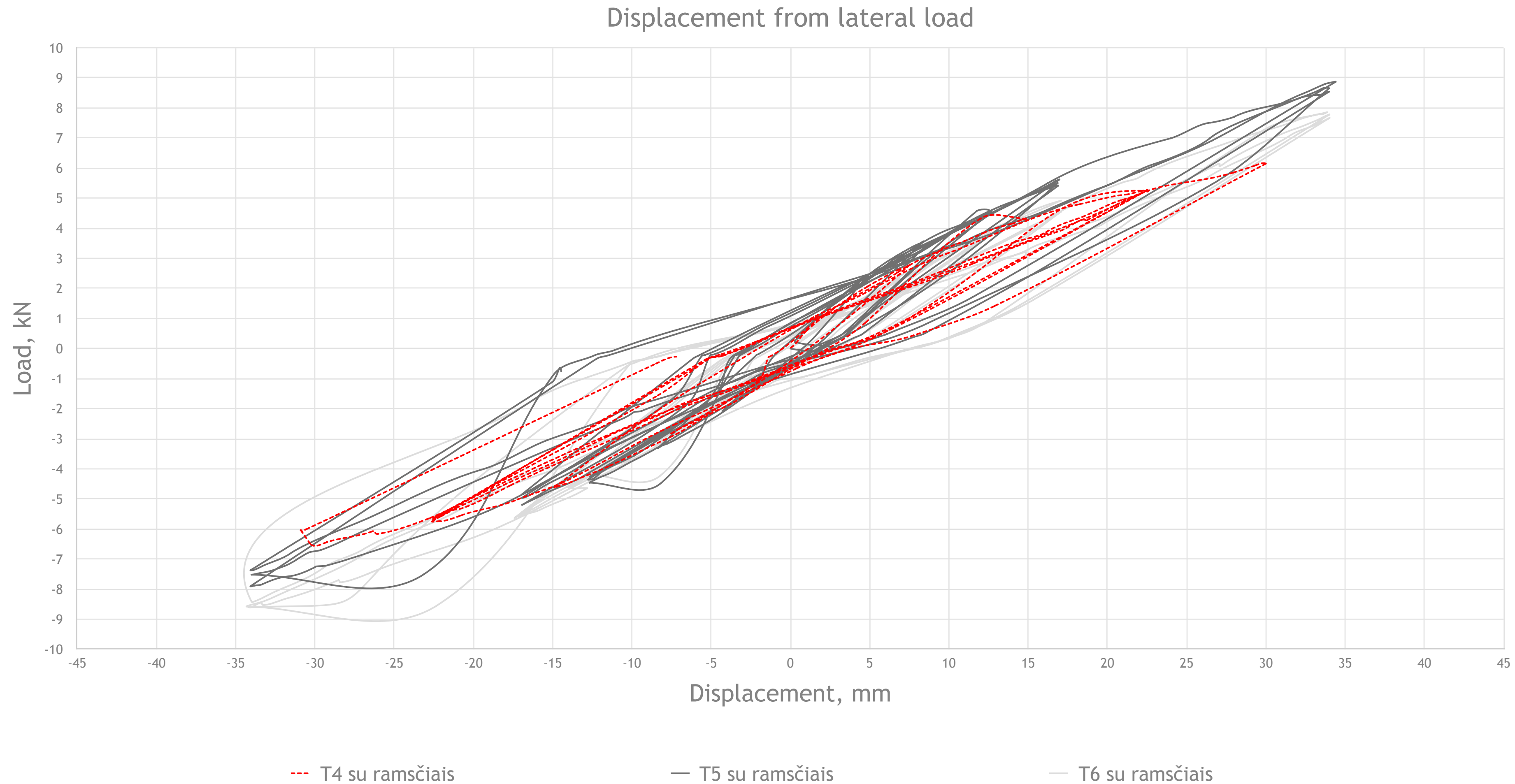
— T1 be ramsčių

- - - T2 be ramsčių

— T3 be ramsčių

T1, T2, T3 – Non-braced panels 1.2x3.0 m

Earthquake tests: Braced panel



T4, T5, T6 – Braced panels 1.2x3.0 m

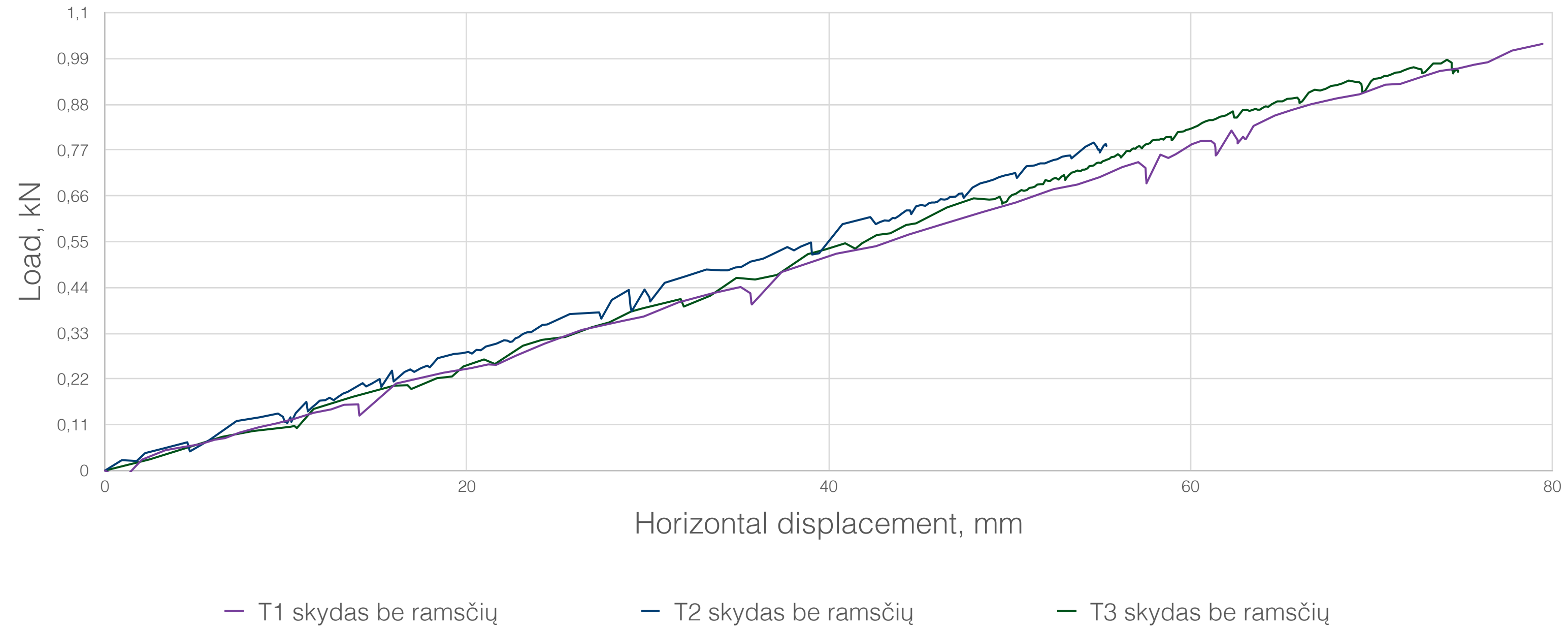
Earthquake tests: Conclusion

EVDR - equivalent viscous damping ratio

	EVDR when Pushing	EVDR when Pulling
Non braced	0.269	0.324
Braced	1.155	0.959
Proportion	4.29	2.96

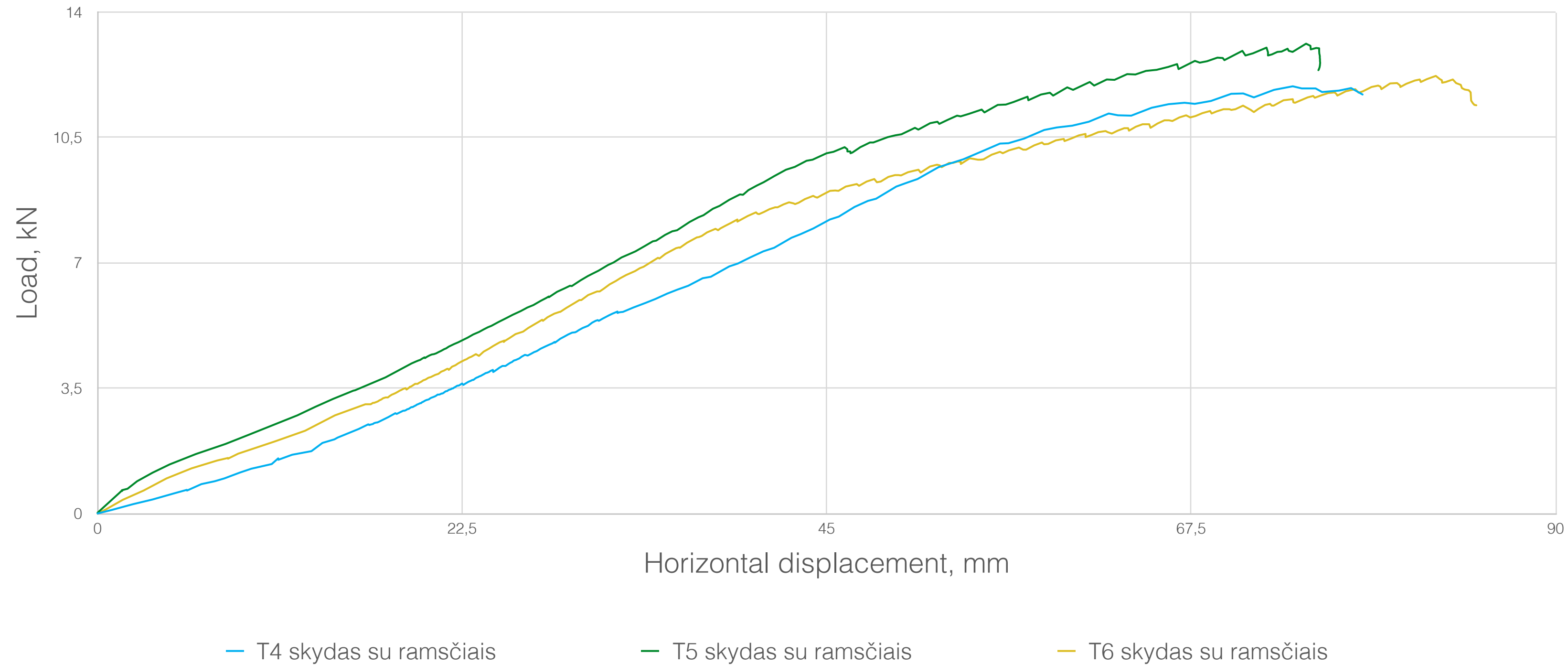
- » The main purpose was to determine EVDR
- » EVDR value can help us to calculate EcoCocon panels in different seismic zones

Lateral load tests: Braced panel



Specimen	Breaking load, F_u	Displacement at breaking point, V_u	Yield load, F_y	Yield displacement, V_y	Plastic parameter, D	Testing time, t
	kN	mm	kN	mm		
T1	not reached	not reached	not reached	not reached	-	180
T2	not reached	not reached	not reached	not reached	-	180
T3	not reached	not reached	not reached	not reached	-	180

Lateral load tests: Braced panel



Specimen	Breaking load, F_u	Displacement at breaking point, V_u	Yield load, F_y	Yield displacement, V_y	Plastic parameter, D	Testing time, t
	kN	mm	kN	mm		
T4	11.93	73.77	10.50	55.50	1.33	180
T5	13.01	72.15	10.28	45.10	1.60	180
T6	12.22	82.60	9.27	44.10	1.87	240