C5b

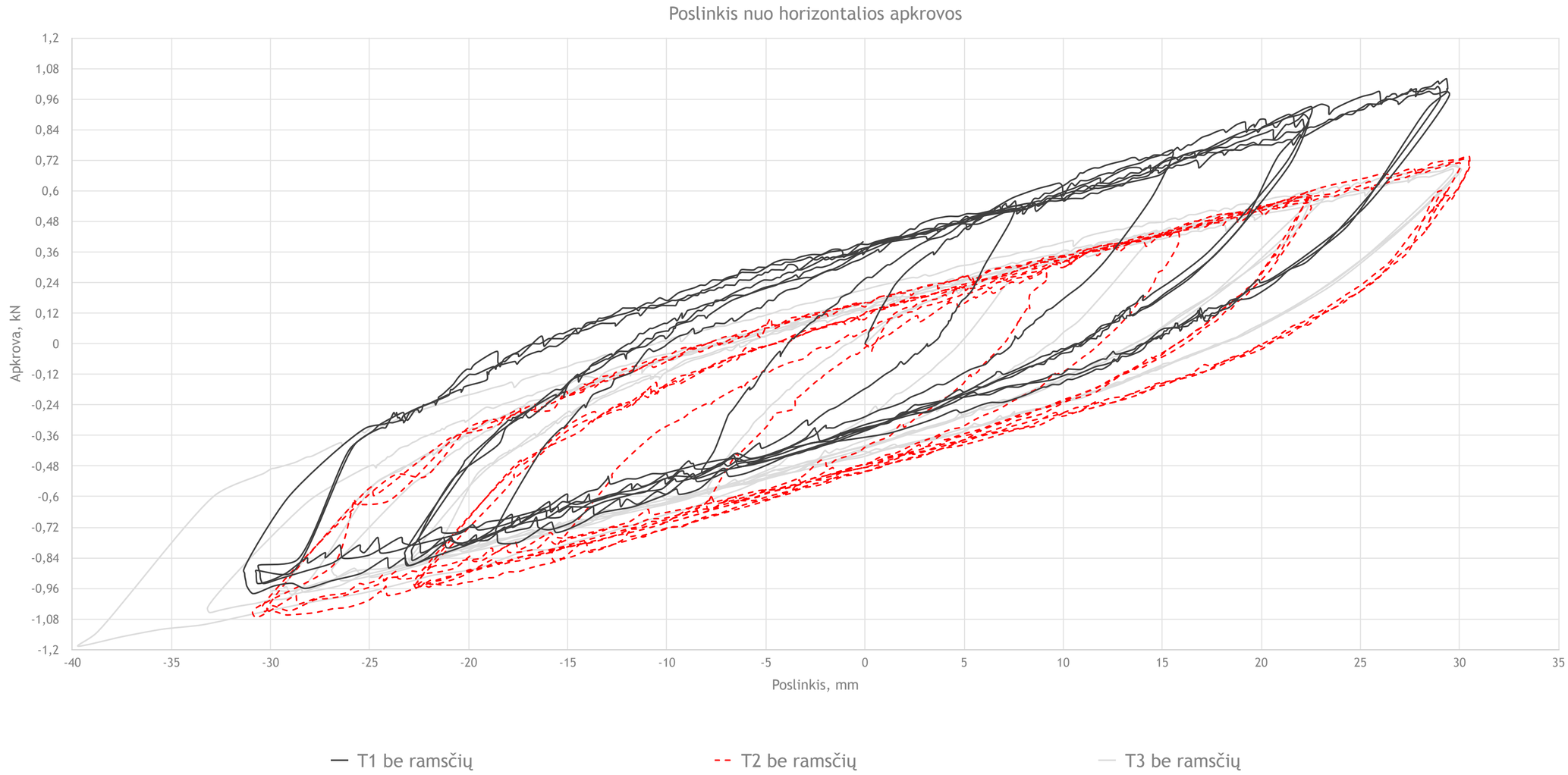
Earthquake Test Results

01 Test Setup
02 Displacement from Lateral Loads
03 EVDR
04 Load Tests

Earthquake tests

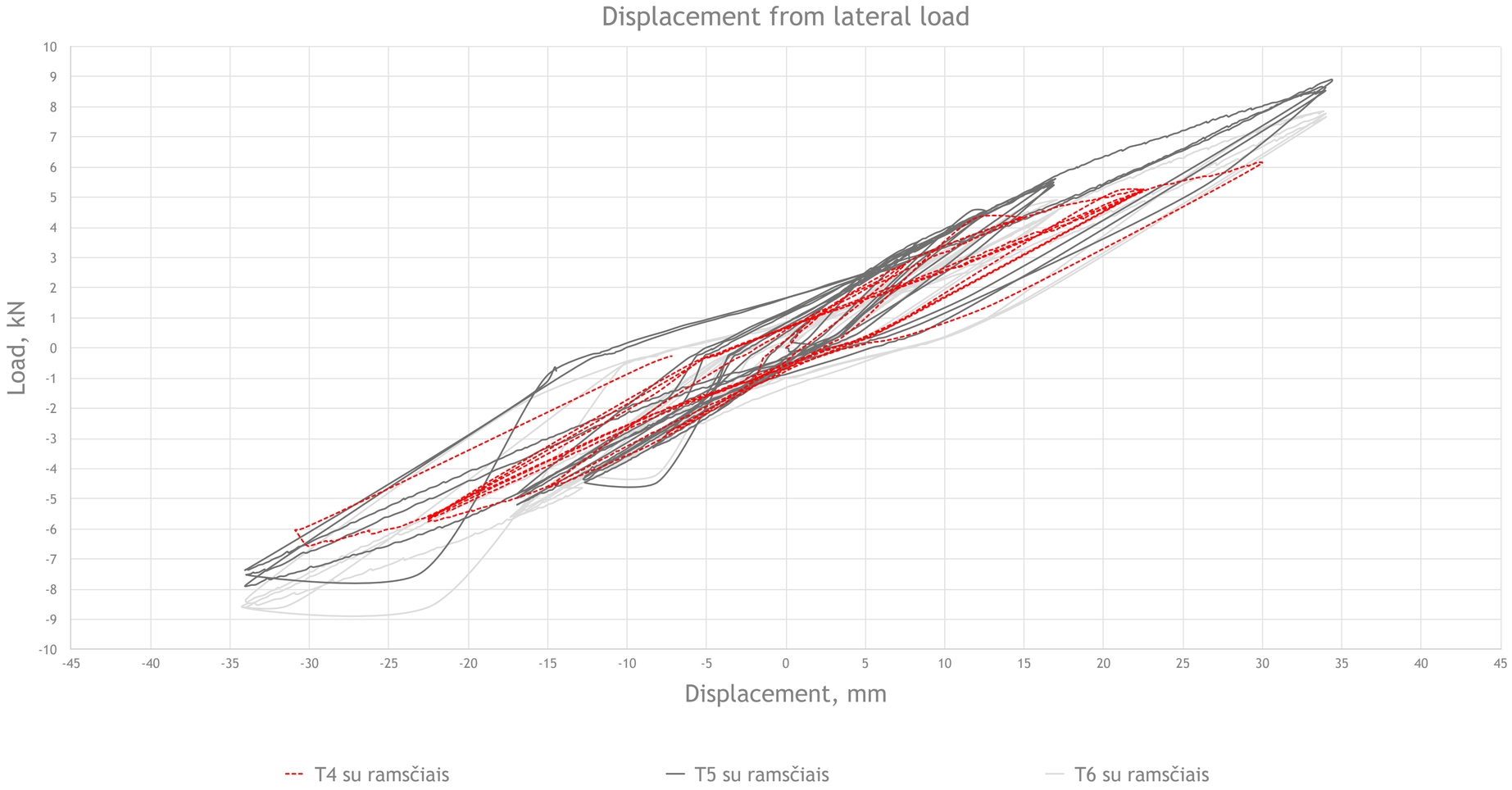
Quasi-static cyclic loading was applied in both cases. For non-braced panel (left) and braced panel (right).

Earthquake tests: Non-braced panel



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

Earthquake tests: Braced panel



T4, T5, T6 – Braced panels 1.2x3.0 m

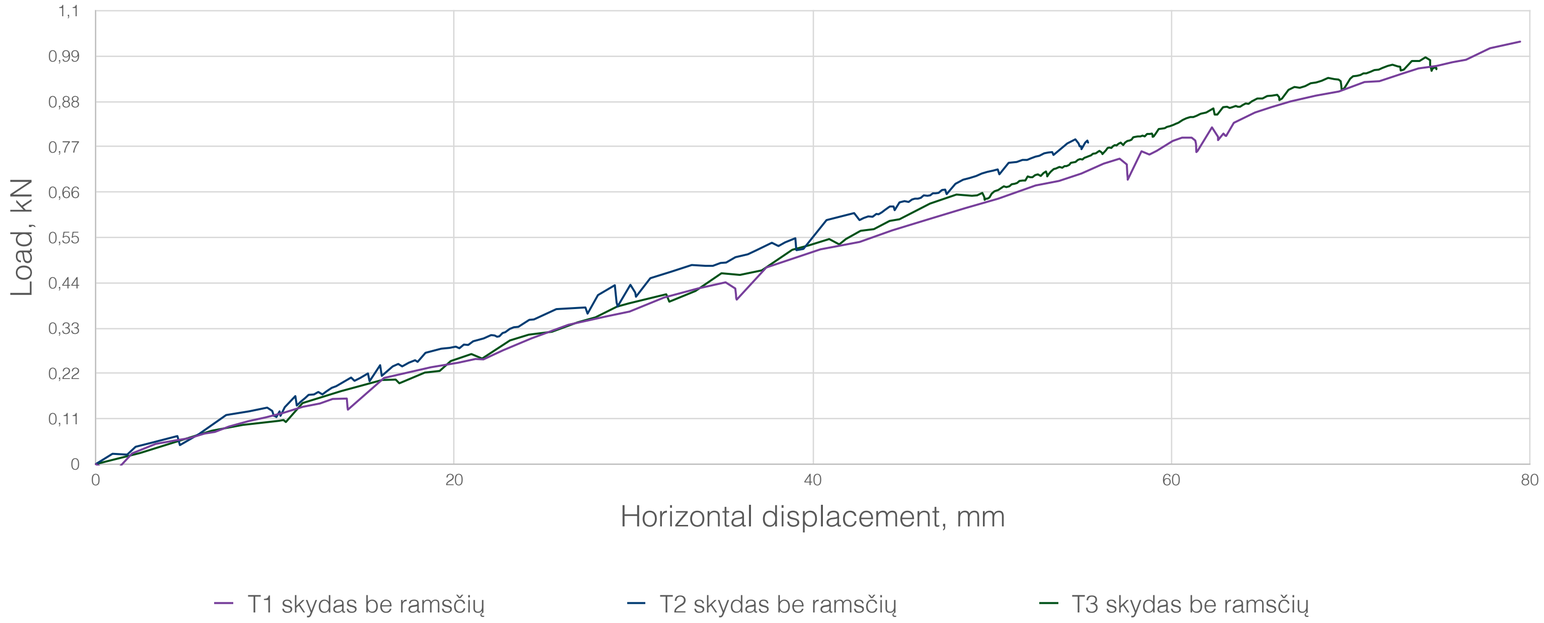
Earthquake tests: Conclusion

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

EVDR - equivalent viscous damping ratio

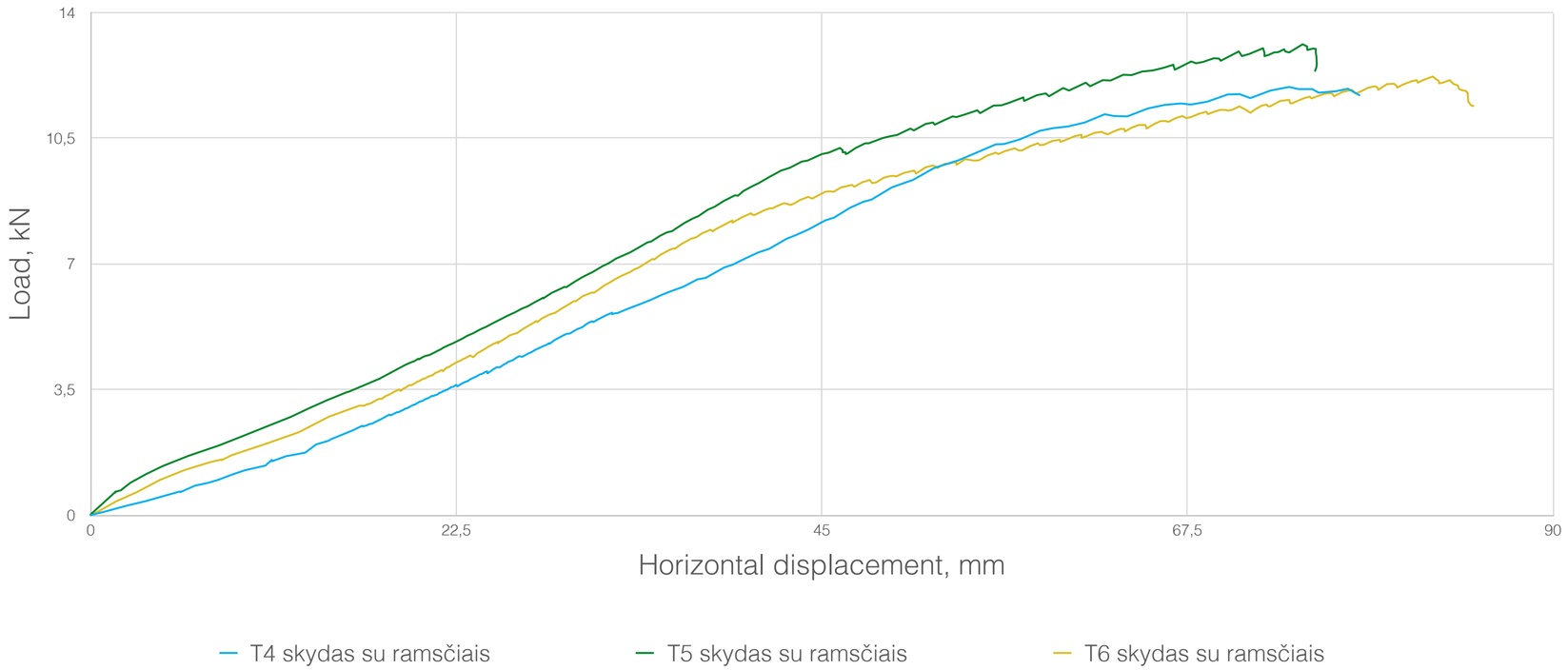
	EVDR when Pushing	EVDR when Pulling
Non braced	0.269	0.324
Braced	1.155	0.959
Proportion	4.29	2.96

Lateral load tests: Braced panel



Specimen	Breaking load, F_u	Displacement at breaking point, V_u	Yeld load, F_y	Yeld displacement, V_y	Plastic parameter, D	Testing time, t
	kN	mm	kN	mm		s
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	Yeld load, F_y	Yeld displacement, V_y	Plastic parameter, D	Testing time, t
	kN	mm	kN	mm		s
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