

Table 1. Adopted fragility and consequence function for structural components

Component	Fragility Functions			Repair/replacement cost (in USD)		
	DS1	DS2	DS3	DS1	DS2	DS3
SHJ connections – one sided	0.0067 (0.4) ³	0.015 (0.4) ³	0.030 (0.4) ³	4,000 (0.4) ¹	5,000 (0.4) ¹	5,200 (0.4) ¹
SHJ connections – two sided	0.0067 (0.4) ³	0.015 (0.4) ³	0.030 (0.4) ³	5,700 (0.4) ¹	7,700 (0.4) ¹	8,100 (0.4) ¹
Steel column base	B1035.022, DS1	B1035.022, DS2	B1035.022, DS3	B1035.022, DS1	B1035.022, DS2	B1035.022, DS3

¹These are cases where the median values were obtained from the consequence estimation tool spreadsheet, and the dispersion were obtained from PACT where available or assumed to be 0.4

²It is assumed that connections have a 25% probability of being inspected upon the onset of partitions incurring damage state 2. These values were obtained from Retamales et al (2013).

References

Retamales R, Davies R, Mosqueda G and Filiatrault A (2013). "Experimental seismic fragility of cold-formed steel framed gypsum partition walls". *Journal of Structural Engineering*, **139**(8): 1285-1293.