

Table IEP-1: Initial Evaluation Procedure -Step 1

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Location	386 Fergusson Drive Building A	Building Name	Fig Tree Café
Site visit By	Benedicto	Date	26/07/12
Process By	AZL	Date	18/08/12

Step 1 - General Information

1.1 Photos (Attached Sufficient Photos to Describe Building)



1.2 Sketch of Building Plan (show Transverse and Longitudinal direction)



1.3 List Relevant feature (occupancy, regularity, structural forms, levels, ground so on)

1. The building seems to be a single storey light timber framed building with concrete tile roof and brick veneers
2. It is free standing
3. The building is used as a cafe shop and a hall. The building hall is very spacious and has got skillion roof. In transverse direction, the bracing elements are spaced far away. The roof diaphragm capacity is critical, apart from the lateral load resisting system in transverse direction.

1.4 Note Information Sources

No drawings by UHCC
site visit data
aerial map

We used $F=1.50$ in transverse direction to allow for the uncertainties associated with the structure inside.
We have $F=2.5$ in longitudinal direction

Determination of $(\%NBS)_b$			
(1) Date of Design and or Date of Code for Strengthening			
1935-1965			
(2) Soil Type			
D soft Soil			
(3) Height and Area			
h_n in m =		5	
A_c in m^2 =			
(4A) Structural System (longitudinal Direction)			
User Defined			
Enter Period		0.4	
(4B) Structural System (Transverse Direction)			
User Defined			
Enter Period		0.4	
(5) Near Fault Factor			
A =		1	
(6) Hazard scaling factor, B			
B =		2.38	
(7) Importance level			
I =		normal structures	
(8) Return Period factor, C			
C =		1	
(9) Ductility factor, D			
Assessed Ductility for this building =			
Longitudinally, μ =		2	
Transversely, μ =		2	
Maximum Ductility factor to be used for all existing buildings			
Pre-1935	1935-65	1965-76	1976-2004
2	2	2	6
(11) Structural Performance Factor, E			
$E_{longitudinal}$ =		1.43	
$E_{transverse}$ =		1.43	

Step 3 of IEP forms Longitudinal	
3.1 Plane Irregularity, Factor A	
insignificant	
A=	1
3.2 Vertical Irregularity, Factor B	
insignificant	
B=	1
3.3 Short Columns, Factor C	
insignificant	
C=	1
3.4 Pounding, Factor D	
Separation between buildings	
Floor Alignment	
D1=	0.7
Height difference <= 2 storeys	
D2=	1
D=	1
3.5 Site Characteristics, Factor E	
no issue	
E=	1
3.6 Other factors, F	
For <=3 storeys, F =2.5 at Maximum	
Otherwise, F=1.5 at Maximum	
Justification reasons:	
F=	2.5

Step 3 of IEP forms Transverse		
3.1 Plane Irregularity, Factor A		
insignificant		
A=		1
3.2 Vertical Irregularity, Factor B		
insignificant		
B=		1
3.3 Short Columns, Factor C		
insignificant		
C=		1
3.4 Pounding, Factor D		
Separation between buildings		
Floor Alignment		
D1=		0.7
Height difference <= 2 storeys		
D2=		1
D=		1
3.5 Site Characteristics, Factor E		
no issue		
E=		1
3.6 Other factors, F		
For <=3 storeys, F =2.5 at Maximum		
Otherwise, F=1.5 at Maximum		
Justification reasons:		
F=		1.5

Summary sheet				
Building Name:	<i>386 Fergusson Drive Building A</i>			
4.1 Baseline %NBS				
Longitudinal Direction	15.5			
Transverse Direction	15.5			
4.2 PAR				
Longitudinal Direction	2.5			
Transverse Direction	1.5			
4.3 Final %NBS				
Longitudinal Direction	38.8			
Transverse Direction	23.3			
Potentially Earthquake Prone?	Yes			