

RAPID VISUAL SCREENING OF BUILDINGS FOR POTENTIAL SEISMIC VULNERABILITY AND CONDITION ASSESSMENT

Sheet A

Survey Engineer Details:

Name: _____
 Contact Number: _____
 e-mail: _____

Building Details:

Address: _____

 Village/Town/City _____ District _____
 State _____ PIN _____
 Landmark: _____
 GPS Coordinates: _____
 No. Stories: _____ Year Built: _____
 Date: _____
 Total Floor Area (sq. m): _____
 Building Name: _____
 Use: _____
 Construction Drawings Available: Yes/ No

PHOTOGRAPH Nos.

OCCUPANCY TYPE		
Assembly	Govt.	Office
Commercial	Historic	Residential
Emer. Service	Industrial	School

OCCUPANCY LOAD	
Max. Number of Persons	
0-10	11-100
101-1000	1000+

SOIL TYPE (IS 1893:2002)		
TYPE I	TYPE II	TYPE III
Hard Soil	Medium Soil	Soft Soil

FALLING HAZARDS			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chimneys	Parapets	Cladding	Other:

SITE MORPHOLOGY					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flat	Crest	Embankment	Downward Slope	Trough	Adjacent to Hill Slopes
Slope of the Terrain (Degrees)			_____		

ASSESSMENT

Investigate the building for the conditions given below and check the appropriate column

I Broad Structural Observations:

Any storey/building noticeably leaning Yes No
 Estimated maximum floor loading (SIDL+IL) Normal Excessive

II Geotechnical/Foundation Observations:

Subsidence, unequal settlements Yes No Not Known
 Plinth level lowered Yes No Not Known

III Condition of Vertical Structural Elements

(Fill separately for each floors using enclosed forms A.1)

IV Condition of Horizontal Structural Elements

(Fill separately for each floors using enclosed forms A.2)

V Capacity of Vertical Structural Elements

(Fill separately for each floors using enclosed forms A.3)

VI Capacity of Horizontal Structural Elements

(Fill separately for each floors using enclosed forms A.4)

III Condition of Vertical Structural Elements (One Form/Floor)

Floor No: _____

A.1

WALL:

Load Bearing Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , Total no. of beams:	___ Nos. inspected	___ Nos. un-inspected		
Wall thickness(mm)	<input type="checkbox"/> 230 <input type="checkbox"/> 350 <input type="checkbox"/> 450 <input type="checkbox"/> 600 <input type="checkbox"/> Other _____			
Type of mortar	<input type="checkbox"/> Mud <input type="checkbox"/> Lime <input type="checkbox"/> Cement <input type="checkbox"/> Gauged			
Is masonry reinforced?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
No. of walls having diagonal/cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
No. of walls having vertical cracks (Except corners)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Bulging or out of plane failure	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Separation of walls (vertical cracks at corner/T-junction)	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , at corners (Number of walls)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
at T - Junctions (Number of walls)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Openings bridged by using:	<input type="checkbox"/> RC Lintels	<input type="checkbox"/> Masonry Arches		
	<input type="checkbox"/> Flat Brick Lintels	<input type="checkbox"/> Timber Lintels	<input type="checkbox"/> None	
Openings				
Nos. with inclined/toothing cracks originating from corners	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Nos. with cross cracks in piers between openings	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

Arches:

Cracks in arches:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Arches collapsed	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Partition Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If Yes , Total no. of partition walls inspected	___ Nos.	
Estimated no. of non-inspected partition walls:	___ Nos.	
Number of Partition walls that have:		
Diagonal/cross cracks	___ No. of Walls	
Vertical cracks	___ No. of Walls	
Separation from main wall / column	___ No. of Walls	
Bulging or out of plane failure	___ No. of Walls	
Horizontal cracks:		
at Sill Level	___ No. of Walls	
at Lintel Level	___ No. of Walls	
at Floor Level	___ No. of Walls	

COLUMNS:

Total no. of Columns: _____ Nos. inspected _____ Nos. un-inspected

Timber (Wooden) Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Diagonal cracks /cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Significant reduction in cross section	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Crushing or decay of timber	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

RCC Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Cracks at beam-column junction	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Diagonal cracks /cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Spalling of concrete	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Crushing of concrete or/and buckling of bars	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

Steel Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Knee bracing provided?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Buckling or bowing of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Tilting or inclination of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Rusting of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Condition of welds/rivets/bolts at joints	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

III Condition of Vertical Structural Elements (One Form/Floor)

Floor No: _____

A.1

WALL:

Load Bearing Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , Total no. of beams:	___ Nos. inspected	___ Nos. un-inspected		
Wall thickness(mm)	<input type="checkbox"/> 230 <input type="checkbox"/> 350 <input type="checkbox"/> 450 <input type="checkbox"/> 600 <input type="checkbox"/> Other _____			
Type of mortar	<input type="checkbox"/> Mud <input type="checkbox"/> Lime <input type="checkbox"/> Cement <input type="checkbox"/> Gauged			
Is masonry reinforced?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
No. of walls having diagonal/cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
No. of walls having vertical cracks (Except corners)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Bulging or out of plane failure	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Separation of walls (vertical cracks at corner/T-junction)	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , at corners (Number of walls)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
at T - Junctions (Number of walls)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Openings bridged by using:	<input type="checkbox"/> RC Lintels	<input type="checkbox"/> Masonry Arches		
	<input type="checkbox"/> Flat Brick Lintels	<input type="checkbox"/> Timber Lintels	<input type="checkbox"/> None	
Openings				
Nos. with inclined/toothing cracks originating from corners	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Nos. with cross cracks in piers between openings	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

Arches:

Cracks in arches:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Arches collapsed	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Partition Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If Yes , Total no. of partition walls inspected	___ Nos.	
Estimated no. of non-inspected partition walls:	___ Nos.	
Number of Partition walls that have:		
Diagonal/cross cracks	___ No. of Walls	
Vertical cracks	___ No. of Walls	
Separation from main wall / column	___ No. of Walls	
Bulging or out of plane failure	___ No. of Walls	
Horizontal cracks:		
at Sill Level	___ No. of Walls	
at Lintel Level	___ No. of Walls	
at Floor Level	___ No. of Walls	

COLUMNS:

Total no. of Columns: _____ Nos. inspected _____ Nos. un-inspected

Timber (Wooden) Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Diagonal cracks /cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Significant reduction in cross section	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Crushing or decay of timber	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

RCC Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Cracks at beam-column junction	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Diagonal cracks /cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Spalling of concrete	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Crushing of concrete or/and buckling of bars	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

Steel Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Knee bracing provided?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Buckling or bowing of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Tilting or inclination of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Rusting of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Condition of welds/rivets/bolts at joints	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

III Condition of Vertical Structural Elements (One Form/Floor)

Floor No: _____

A.1

WALL:

Load Bearing Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , Total no. of beams:	___ Nos. inspected	___ Nos. un-inspected		
Wall thickness(mm)	<input type="checkbox"/> 230	<input type="checkbox"/> 350	<input type="checkbox"/> 450	<input type="checkbox"/> 600
Type of mortar	<input type="checkbox"/> Mud <input type="checkbox"/> Lime <input type="checkbox"/> Cement <input type="checkbox"/> Gauged			
Is masonry reinforced?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
No. of walls having diagonal/cross cracks	S0-S1___	S2-S3___	S4___	S5___
No. of walls having vertical cracks (Except corners)	S0-S1___	S2-S3___	S4___	S5___
Bulging or out of plane failure	S0-S1___	S2-S3___	S4___	S5___
Separation of walls (vertical cracks at corner/T-junction)	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , at corners (Number of walls)	S0-S1___	S2-S3___	S4___	S5___
at T - Junctions (Number of walls)	S0-S1___	S2-S3___	S4___	S5___
Openings bridged by using:	<input type="checkbox"/> RC Lintels <input type="checkbox"/> Masonry Arches			
	<input type="checkbox"/> Flat Brick Lintels <input type="checkbox"/> Timber Lintels <input type="checkbox"/> None			
Openings				
Nos. with inclined/toothing cracks originating from corners	S0-S1___	S2-S3___	S4___	S5___
Nos. with cross cracks in piers between openings	S0-S1___	S2-S3___	S4___	S5___

Arches:

Cracks in arches:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Arches collapsed	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Partition Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If Yes , Total no. of partition walls inspected	___ Nos.	
Estimated no. of non-inspected partition walls:	___ Nos.	
Number of Partition walls that have:		
Diagonal/cross cracks	___ No. of Walls	
Vertical cracks	___ No. of Walls	
Separation from main wall / column	___ No. of Walls	
Bulging or out of plane failure	___ No. of Walls	
Horizontal cracks:		
at Sill Level	___ No. of Walls	
at Lintel Level	___ No. of Walls	
at Floor Level	___ No. of Walls	

COLUMNS:

Total no. of Columns: ___ Nos. inspected ___ Nos. un-inspected

Timber (Wooden) Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Diagonal cracks /cross cracks	S0-S1___	S2-S3___	S4___	S5___
Significant reduction in cross section	S0-S1___	S2-S3___	S4___	S5___
Crushing or decay of timber	S0-S1___	S2-S3___	S4___	S5___

RCC Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Cracks at beam-column junction	S0-S1___	S2-S3___	S4___	S5___
Diagonal cracks /cross cracks	S0-S1___	S2-S3___	S4___	S5___
Spalling of concrete	S0-S1___	S2-S3___	S4___	S5___
Crushing of concrete or/and buckling of bars	S0-S1___	S2-S3___	S4___	S5___

Steel Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Knee bracing provided?	S0-S1___	S2-S3___	S4___	S5___
Buckling or bowing of columns?	S0-S1___	S2-S3___	S4___	S5___
Tilting or inclination of columns?	S0-S1___	S2-S3___	S4___	S5___
Rusting of columns?	S0-S1___	S2-S3___	S4___	S5___
Condition of welds/rivets/bolts at joints	S0-S1___	S2-S3___	S4___	S5___

III Condition of Vertical Structural Elements (One Form/Floor)

Floor No: _____

A.1

WALL:

Load Bearing Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , Total no. of beams:	___ Nos. inspected	___ Nos. un-inspected		
Wall thickness(mm)	<input type="checkbox"/> 230 <input type="checkbox"/> 350 <input type="checkbox"/> 450 <input type="checkbox"/> 600 <input type="checkbox"/> Other _____			
Type of mortar	<input type="checkbox"/> Mud <input type="checkbox"/> Lime <input type="checkbox"/> Cement <input type="checkbox"/> Gauged			
Is masonry reinforced?	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
No. of walls having diagonal/cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
No. of walls having vertical cracks (Except corners)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Bulging or out of plane failure	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Separation of walls (vertical cracks at corner/T-junction)	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , at corners (Number of walls)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
at T - Junctions (Number of walls)	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Openings bridged by using:	<input type="checkbox"/> RC Lintels	<input type="checkbox"/> Masonry Arches		
	<input type="checkbox"/> Flat Brick Lintels	<input type="checkbox"/> Timber Lintels	<input type="checkbox"/> None	
Openings				
Nos. with inclined/toothing cracks originating from corners	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Nos. with cross cracks in piers between openings	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

Arches:

Cracks in arches:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Arches collapsed	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Partition Wall:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If Yes , Total no. of partition walls inspected	___ Nos.	
Estimated no. of non-inspected partition walls:	___ Nos.	
Number of Partition walls that have:		
Diagonal/cross cracks	___ No. of Walls	
Vertical cracks	___ No. of Walls	
Separation from main wall / column	___ No. of Walls	
Bulging or out of plane failure	___ No. of Walls	
Horizontal cracks:		
at Sill Level	___ No. of Walls	
at Lintel Level	___ No. of Walls	
at Floor Level	___ No. of Walls	

COLUMNS:

Total no. of Columns: _____ Nos. inspected _____ Nos. un-inspected

Timber (Wooden) Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Diagonal cracks /cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Significant reduction in cross section	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Crushing or decay of timber	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

RCC Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Cracks at beam-column junction	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Diagonal cracks /cross cracks	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Spalling of concrete	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Crushing of concrete or/and buckling of bars	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

Steel Columns:

	<input type="checkbox"/> Yes	<input type="checkbox"/> No		
If Yes , total no. of columns (inspected):	___ Nos.			
Knee bracing provided?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Buckling or bowing of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Tilting or inclination of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Rusting of columns?	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___
Condition of welds/rivets/bolts at joints	S0-S1 ___	S2-S3 ___	S4 ___	S5 ___

IV Condition of Horizontal Structural Elements (One Form/Suspended Slab) Suspended Slab No: _____

Total no. of beams: _____Nos. inspected _____Nos. un-inspected

Timber (Wooden) Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

Nos. with loss of support/displacement of beam S0-S1____ S2-S3____ S4____ S5____

Nos. with weathering/disintegration of beam near support S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Are chords present? Yes No Not Known

If Yes, nos. of chords have been bent in lateral direction? S0-S1____ S2-S3____ S4____ S5____

Concrete Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

No. of beams with horizontal tension cracks at bottom S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near supports S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near mid-span S0-S1____ S2-S3____ S4____ S5____

No. of beams with diagonal cracks near supports S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Steel Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

If Yes, no. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Weathering/corrosion of beam S0-S1____ S2-S3____ S4____ S5____

Condition of welds/rivets/bolts at joints S0-S1____ S2-S3____ S4____ S5____

Loss of support / displacement of beams S0-S1____ S2-S3____ S4____ S5____

Floor beams have been braced horizontally? Yes No Not Known

If Yes, connection between bracings & beams damaged? S0-S1____ S2-S3____

Diagonals of bracing have buckled or yielded? S0-S1____ S2-S3____

Chords have been bent in lateral direction? S0-S1____ S2-S3____

RCC Slab: Yes No Not Known

If Yes, spalling of concrete/exposed reinforcement S0-S1____ S2-S3____ S4____ S5____

Excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Cantilever slabs are damaged? S0-S1____ S2-S3____ S4____ S5____

Punching shear damage? S0-S1____ S2-S3____ S4____ S5____

Are there cut-outs in slabs? Yes No Not Known

If Yes, then indicate damage adjacent to cut-out None/Minor Moderate Severe

Corner cracks next to cut-out None/Minor Moderate Severe

Floor Supported on Timber (Wooden) Joists: Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Nos. of Joists _____Nos. failed _____Nos. excessively bent

_____Nos. moved from supporting wall/binder

Floor Supported on Steel Joists: Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Loss of section due to rusting of joists _____

Bending (Sagging of Joists) _____

Jack Arch Floor: Yes No Not Known

If Yes, joists supporting vault RCC Steel

Excessive deflection of Joists _____No. of Joists

Failure in vaults _____Nos. cracked _____Nos. cracked

Ties provided Yes No **If yes,**No. failed ties: _____Nos.

Hollow Block Floor: Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

Caststone slab: Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

IV Condition of Horizontal Structural Elements (One Form/Suspended Slab) Suspended Slab No: _____

Total no. of beams: _____Nos. inspected _____Nos. un-inspected

Timber (Wooden) Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

Nos. with loss of support/displacement of beam S0-S1____ S2-S3____ S4____ S5____

Nos. with weathering/disintegration of beam near support S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

 Are chords present? Yes No Not Known

If Yes, nos. of chords have been bent in lateral direction? S0-S1____ S2-S3____ S4____ S5____

Concrete Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

No. of beams with horizontal tension cracks at bottom S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near supports S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near mid-span S0-S1____ S2-S3____ S4____ S5____

No. of beams with diagonal cracks near supports S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Steel Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

If Yes, no. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Weathering/corrosion of beam S0-S1____ S2-S3____ S4____ S5____

Condition of welds/rivets/bolts at joints S0-S1____ S2-S3____ S4____ S5____

Loss of support / displacement of beams S0-S1____ S2-S3____ S4____ S5____

 Floor beams have been braced horizontally? Yes No Not Known

If Yes, connection between bracings & beams damaged? S0-S1____ S2-S3____

Diagonals of bracing have buckled or yielded? S0-S1____ S2-S3____

Chords have been bent in lateral direction? S0-S1____ S2-S3____

RCC Slab: Yes No Not Known

If Yes, spalling of concrete/exposed reinforcement S0-S1____ S2-S3____ S4____ S5____

Excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Cantilever slabs are damaged? S0-S1____ S2-S3____ S4____ S5____

Punching shear damage? S0-S1____ S2-S3____ S4____ S5____

 Are there cut-outs in slabs? Yes No Not Known

If Yes, then indicate damage adjacent to cut-out None/Minor Moderate Severe

 Corner cracks next to cut-out None/Minor Moderate Severe

Floor Supported on Timber (Wooden) Joists: Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Nos. of Joists _____Nos. failed _____Nos. excessively bent

_____Nos. moved from supporting wall/binder

Floor Supported on Steel Joists: Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Loss of section due to rusting of joists _____

Bending (Sagging of Joists) _____

Jack Arch Floor: Yes No Not Known

If Yes, joists supporting vault RCC Steel

Excessive deflection of Joists _____No. of Joists

Failure in vaults _____Nos. cracked _____Nos. cracked

 Ties provided Yes No **If yes,** No. failed ties: _____Nos.

Hollow Block Floor: Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

Caststone slab: Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

IV Condition of Horizontal Structural Elements (One Form/Suspended Slab) Suspended Slab No: _____

Total no. of beams: _____Nos. inspected _____Nos. un-inspected

Timber (Wooden) Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

Nos. with loss of support/displacement of beam S0-S1____ S2-S3____ S4____ S5____

Nos. with weathering/disintegration of beam near support S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Are chords present? Yes No Not Known

If Yes, nos. of chords have been bent in lateral direction? S0-S1____ S2-S3____ S4____ S5____

Concrete Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

No. of beams with horizontal tension cracks at bottom S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near supports S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near mid-span S0-S1____ S2-S3____ S4____ S5____

No. of beams with diagonal cracks near supports S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Steel Beam: Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

If Yes, no. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Weathering/corrosion of beam S0-S1____ S2-S3____ S4____ S5____

Condition of welds/rivets/bolts at joints S0-S1____ S2-S3____ S4____ S5____

Loss of support / displacement of beams S0-S1____ S2-S3____ S4____ S5____

Floor beams have been braced horizontally? Yes No Not Known

If Yes, connection between bracings & beams damaged? S0-S1____ S2-S3____

Diagonals of bracing have buckled or yielded? S0-S1____ S2-S3____

Chords have been bent in lateral direction? S0-S1____ S2-S3____

RCC Slab: Yes No Not Known

If Yes, spalling of concrete/exposed reinforcement S0-S1____ S2-S3____ S4____ S5____

Excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Cantilever slabs are damaged? S0-S1____ S2-S3____ S4____ S5____

Punching shear damage? S0-S1____ S2-S3____ S4____ S5____

Are there cut-outs in slabs? Yes No Not Known

If Yes, then indicate damage adjacent to cut-out None/Minor Moderate Severe

Corner cracks next to cut-out None/Minor Moderate Severe

Floor Supported on Timber (Wooden) Joists: Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Nos. of Joists _____Nos. failed _____Nos. excessively bent

_____Nos. moved from supporting wall/binder

Floor Supported on Steel Joists: Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Loss of section due to rusting of joists _____

Bending (Sagging of Joists) _____

Jack Arch Floor: Yes No Not Known

If Yes, joists supporting vault RCC Steel

Excessive deflection of Joists _____No. of Joists

Failure in vaults _____Nos. cracked _____Nos. cracked

Ties provided Yes No **If yes,**No. failed ties: _____Nos.

Hollow Block Floor: Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

Caststone slab: Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

IV Condition of Horizontal Structural Elements (One Form/Suspended Slab) Suspended Slab No: _____

Total no. of beams: _____Nos. inspected _____Nos. un-inspected

Timber (Wooden) Beam:
 Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

Nos. with loss of support/displacement of beam S0-S1____ S2-S3____ S4____ S5____

Nos. with weathering/disintegration of beam near support S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

 Are chords present? Yes No Not Known

If Yes, nos. of chords have been bent in lateral direction? S0-S1____ S2-S3____ S4____ S5____

Concrete Beam:
 Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

No. of beams with horizontal tension cracks at bottom S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near supports S0-S1____ S2-S3____ S4____ S5____

No. of beams with vertical cracks near mid-span S0-S1____ S2-S3____ S4____ S5____

No. of beams with diagonal cracks near supports S0-S1____ S2-S3____ S4____ S5____

Nos. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Steel Beam:
 Yes No Not Known

If Yes, no. of framing beams (inspected) _____Nos.

If Yes, no. with noticeable deflection/sagging S0-S1____ S2-S3____ S4____ S5____

Weathering/corrosion of beam S0-S1____ S2-S3____ S4____ S5____

Condition of welds/rivets/bolts at joints S0-S1____ S2-S3____ S4____ S5____

Loss of support / displacement of beams S0-S1____ S2-S3____ S4____ S5____

 Floor beams have been braced horizontally? Yes No Not Known

If Yes, connection between bracings & beams damaged? S0-S1____ S2-S3____

Diagonals of bracing have buckled or yielded? S0-S1____ S2-S3____

Chords have been bent in lateral direction? S0-S1____ S2-S3____

RCC Slab:
 Yes No Not Known

If Yes, spalling of concrete/exposed reinforcement S0-S1____ S2-S3____ S4____ S5____

Excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Cantilever slabs are damaged? S0-S1____ S2-S3____ S4____ S5____

Punching shear damage? S0-S1____ S2-S3____ S4____ S5____

 Are there cut-outs in slabs? Yes No Not Known

If Yes, then indicate damage adjacent to cut-out None/Minor Moderate Severe

 Corner cracks next to cut-out None/Minor Moderate Severe

Floor Supported on Timber (Wooden) Joists:
 Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Nos. of Joists _____Nos. failed _____Nos. excessively bent

_____Nos. moved from supporting wall/binder

Floor Supported on Steel Joists:
 Yes No Not Known

If Yes, excessive deflection of slab S0-S1____ S2-S3____ S4____ S5____

Loss of section due to rusting of joists _____

Bending (Sagging of Joists) _____

Jack Arch Floor:
 Yes No Not Known

If Yes, joists supporting vault RCC Steel

Excessive deflection of Joists _____No. of Joists

Failure in vaults _____Nos. cracked _____Nos. cracked

 Ties provided Yes No **If yes**, No. failed ties: _____Nos.

Hollow Block Floor:
 Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

Caststone slab:
 Yes No Not Known

If Yes, spalling of concrete / exposed reinforcement _____

Vertical displacement due to support movement _____

Connections in slab damaged _____

VII BUILDING SAFETY LEVEL

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

Floor No. _____		
Structural Element	Safe (Nos.)	Unsafe (Nos.)
RCC column		
Wooden Column		
Steel Column		
Masonry Wall		
Jack Arch Floor		
RCC slab (One-Way)		
RCC slab (Two-Way)		
RCC Beam		
Wooden Beam		
Steel Beam		

RESULTS

I Building Damage Safety Level (On the basis of visual condition assessment)

- S0 - S2
- S3
- S4
- S5

II Detailed Assessment of the Building (On the basis of calculations)

- S0 - S2
- S3
- S4
- S5

III Further Evaluation Recommended

- Yes No

COMMENTS AND REMARKS
