

Support Action for Strengthening PAlestine capabilities for seismic Risk Mitigation

SASPARM 2.0

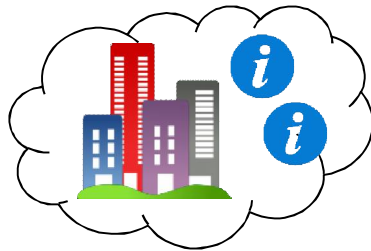
**2014 PROJECT FOR CIVIL PROTECTION FINANCIAL INSTRUMENT
PREPAREDNESS AND PREVENTION SCHEME**

TRAINING CONTENTS OF COLLECTION FORM FOR PRACTITIONERS

Name
e-mail



HOW TO COLLECT DATA?



Name of the complex		Education level					
1) Identification of the Building							
Municipality		Street name					
Street name		Street number					
Name of the building		Geographical Coordinates (WGS 84 System)					
Lat.		Long.					
Position of Building							
1) Isolated Building		2) Internal Building					
3) End Building		4) Corner Building					
2) Description of the Building							
N° Total floors with basement	Metrics		Age	Construction and renovation	Type of Use	Use - Exposure	
	Average floor height [m]	Average floor area [m ²]				N° walls of use	% of use
0	2.50	100	0-10	0	Housing	0	0-10%
1-3	2.50-3.50	100-1000	11-15	1	Productive	1	10-30%
2-10	3.50-5.00	1000-10000	16-25	2	Trade	2	30-50%
3-10	5.00-7.50	10000-100000	26-40	3	Office	3	50-70%
3-4	7.50-10.00	100000-1000000	41-60	4	Public Service	4	70-90%
5-10	10.00-15.00	1000000-10000000	61-75	5	Industrial	5	90-100%
> 10	> 15.00	> 10000000	> 75	6	Special	6	> 90%
0	0	0	0	0	Other	0	0%
1	1	1	1	1	Abandoned	1	Abandoned
2	2	2	2	2	Other	2	Other
3	3	3	3	3	Other	3	Other
4	4	4	4	4	Other	4	Other
5	5	5	5	5	Other	5	Other
6	6	6	6	6	Other	6	Other
7	7	7	7	7	Other	7	Other
8	8	8	8	8	Other	8	Other
9	9	9	9	9	Other	9	Other
10	10	10	10	10	Other	10	Other
11	11	11	11	11	Other	11	Other
12	12	12	12	12	Other	12	Other
13	13	13	13	13	Other	13	Other
14	14	14	14	14	Other	14	Other
15	15	15	15	15	Other	15	Other
16	16	16	16	16	Other	16	Other
17	17	17	17	17	Other	17	Other
18	18	18	18	18	Other	18	Other
19	19	19	19	19	Other	19	Other
20	20	20	20	20	Other	20	Other
21	21	21	21	21	Other	21	Other
22	22	22	22	22	Other	22	Other
23	23	23	23	23	Other	23	Other
24	24	24	24	24	Other	24	Other
25	25	25	25	25	Other	25	Other
26	26	26	26	26	Other	26	Other
27	27	27	27	27	Other	27	Other
28	28	28	28	28	Other	28	Other
29	29	29	29	29	Other	29	Other
30	30	30	30	30	Other	30	Other
31	31	31	31	31	Other	31	Other
32	32	32	32	32	Other	32	Other
33	33	33	33	33	Other	33	Other
34	34	34	34	34	Other	34	Other
35	35	35	35	35	Other	35	Other
36	36	36	36	36	Other	36	Other
37	37	37	37	37	Other	37	Other
38	38	38	38	38	Other	38	Other
39	39	39	39	39	Other	39	Other
40	40	40	40	40	Other	40	Other
41	41	41	41	41	Other	41	Other
42	42	42	42	42	Other	42	Other
43	43	43	43	43	Other	43	Other
44	44	44	44	44	Other	44	Other
45	45	45	45	45	Other	45	Other
46	46	46	46	46	Other	46	Other
47	47	47	47	47	Other	47	Other
48	48	48	48	48	Other	48	Other
49	49	49	49	49	Other	49	Other
50	50	50	50	50	Other	50	Other
51	51	51	51	51	Other	51	Other
52	52	52	52	52	Other	52	Other
53	53	53	53	53	Other	53	Other
54	54	54	54	54	Other	54	Other
55	55	55	55	55	Other	55	Other
56	56	56	56	56	Other	56	Other
57	57	57	57	57	Other	57	Other
58	58	58	58	58	Other	58	Other
59	59	59	59	59	Other	59	Other
60	60	60	60	60	Other	60	Other
61	61	61	61	61	Other	61	Other
62	62	62	62	62	Other	62	Other
63	63	63	63	63	Other	63	Other
64	64	64	64	64	Other	64	Other
65	65	65	65	65	Other	65	Other
66	66	66	66	66	Other	66	Other
67	67	67	67	67	Other	67	Other
68	68	68	68	68	Other	68	Other
69	69	69	69	69	Other	69	Other
70	70	70	70	70	Other	70	Other
71	71	71	71	71	Other	71	Other
72	72	72	72	72	Other	72	Other
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79	79	79	79	79	Other	79	Other
80	80	80	80	80	Other	80	Other
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84	84	84	84	84	Other	84	Other
85	85	85	85	85	Other	85	Other
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87	87	87	87	87	Other	87	Other
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90	90	90	90	90	Other	90	Other
91	91	91	91	91	Other	91	Other
92	92	92	92	92	Other	92	Other
93	93	93	93	93	Other	93	Other
94	94	94	94	94	Other	94	Other
95	95	95	95	95	Other	95	Other
96	96	96	96	96	Other	96	Other
97	97	97	97	97	Other	97	Other
98	98	98	98	98	Other	98	Other
99	99	99	99	99	Other	99	Other
100	100	100	100	100	Other	100	Other





HOW TO COLLECT DATA?

Name of the compiler _____
Education level _____

1) Identification of the Building

Municipality _____

Street name _____ Street number _____

Name of the building _____

Geographical Coordinates (WGS 84 System) Lat. _____ Long. _____

Position of Building:

1 Isolated Building 2 Internal Building 3 End Building 4 Corner Building

2) Description of the Building

Metrics			Age	Use - Exposure																																				
N° Total floors with basement	Average of floor height [m]	Average of floor area [m²]	Construction and renovation [max 2]	Type of Use	N° units of use	% of Use	Occupants																																	
<input type="radio"/> 1 <input type="radio"/> 9 <input type="radio"/> 2 <input type="radio"/> 10 <input type="radio"/> 3 <input type="radio"/> 11 <input type="radio"/> 4 <input type="radio"/> 12 <input type="radio"/> 5 <input type="radio"/> >12 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8	<input type="radio"/> 1 < 2.50 <input type="radio"/> 2 2.50 ÷ 3.50 <input type="radio"/> 3 3.51 ÷ 5.0 <input type="radio"/> 4 > 5.0	<input type="radio"/> A < 50 <input type="radio"/> I 401 ÷ 500 <input type="radio"/> B 51 ÷ 70 <input type="radio"/> L 501 ÷ 650 <input type="radio"/> C 71 ÷ 100 <input type="radio"/> M 651 ÷ 900 <input type="radio"/> D 101 ÷ 130 <input type="radio"/> N 901 ÷ 1200 <input type="radio"/> E 131 ÷ 170 <input type="radio"/> O 1201 ÷ 1600 <input type="radio"/> F 171 ÷ 230 <input type="radio"/> P 1601 ÷ 2200 <input type="radio"/> G 231 ÷ 300 <input type="radio"/> Q 2201 ÷ 3000 <input type="radio"/> H 301 ÷ 400 <input type="radio"/> R > 3000	<input type="checkbox"/> 1 ≤ 1919 <input type="checkbox"/> 2 19 ÷ 45 <input type="checkbox"/> 3 46 ÷ 61 <input type="checkbox"/> 4 62 ÷ 71 <input type="checkbox"/> 5 72 ÷ 81 <input type="checkbox"/> 6 81 ÷ 91 <input type="checkbox"/> 7 91 ÷ 02 <input type="checkbox"/> 8 ≥ 2002	<input type="checkbox"/> Housing <input type="checkbox"/> Productive <input type="checkbox"/> Trade <input type="checkbox"/> Offices <input type="checkbox"/> Public Service <input type="checkbox"/> Deposit <input type="checkbox"/> Strategic <input type="checkbox"/> Touristic - Accommodation	<input type="checkbox"/> A > 65% <input type="checkbox"/> B 30 ÷ 65% <input type="checkbox"/> C < 30% <input type="checkbox"/> D Under Construction <input type="checkbox"/> E Unfinished <input type="checkbox"/> F Abandoned	<table border="1"> <tr><td>100</td><td>10</td><td>1</td></tr> <tr><td>0</td><td>0</td><td>0</td></tr> <tr><td>1</td><td>1</td><td>1</td></tr> <tr><td>2</td><td>2</td><td>2</td></tr> <tr><td>3</td><td>3</td><td>3</td></tr> <tr><td>4</td><td>4</td><td>4</td></tr> <tr><td>5</td><td>5</td><td>5</td></tr> <tr><td>6</td><td>6</td><td>6</td></tr> <tr><td>7</td><td>7</td><td>7</td></tr> <tr><td>8</td><td>8</td><td>8</td></tr> <tr><td>9</td><td>9</td><td>9</td></tr> </table>	100	10	1	0	0	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	Property A <input type="radio"/> Public B <input type="radio"/> Private
100	10	1																																						
0	0	0																																						
1	1	1																																						
2	2	2																																						
3	3	3																																						
4	4	4																																						
5	5	5																																						
6	6	6																																						
7	7	7																																						
8	8	8																																						
9	9	9																																						

3) Structural Data

Vertical Structure of the Building

Masonry	Reinforced Concrete	If the building is in reinforced concrete:	
<input type="radio"/> A	<input type="radio"/> B	B.1 <input type="checkbox"/> The building has no walls at floors:	B.2 <input type="checkbox"/> The building has partially walls at floors:
		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
		<input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8	<input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8
		<input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> ≥12	<input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> ≥12
		B.3 <input type="checkbox"/> The building is composed totally by walls	B.4 <input type="checkbox"/> The building has RC shear walls

Horizontal Structure					Roof			
Not identified	Solid slab with drop beams	Reinforced concrete ribbed slab	Reinforced concrete slab	Steel concrete slab	Heavy and flat	Heavy and sloped	Light and flat	Light and sloped
<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4) Regularity

In plan		In elevation	
Regular	Not regular	Regular	Not regular
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5) Geomorphological Data

Morphology site				Landslides		Category of soil foundation
Ridge	Strong slope	Slight slope	Lowland	Absent	Existing	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

6) Notes

Date _____ The Compiler (Block Letters) _____ Sign of the Compiler _____

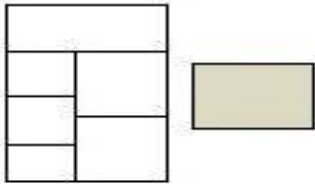
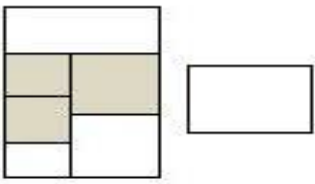
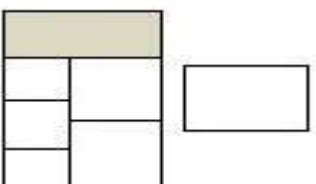
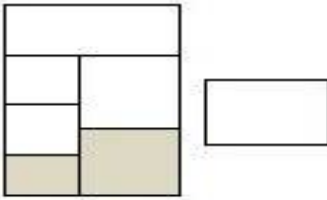
Taxonomy

1. Identification (address, coordinates, position)
2. Description (height, m², age, use..)
3. Structural Data (material of resisting system, roof..)
4. Regularity
5. Geomorphological data
6. Notes



Fill the form

1. Identification: Yours and of the building

Name of the compiler			
Education level			
1) Identification of the Building			
Municipality			
Street name			Street number
Name of the building			
Geographical Coordinates (WGS 84 System)	Lat.		
	Long.		
Position of Building :			
1 <input type="radio"/> Isolated Building	2 <input type="radio"/> Internal Building	3 <input type="radio"/> End Building	4 <input type="radio"/> Corner Building
			

Square boxes (□) indicate the possibility of multiple answers;
 Round boxes (○) instead allow only a single choice;
 For boxes (|_|) it is necessary to write in block letters.

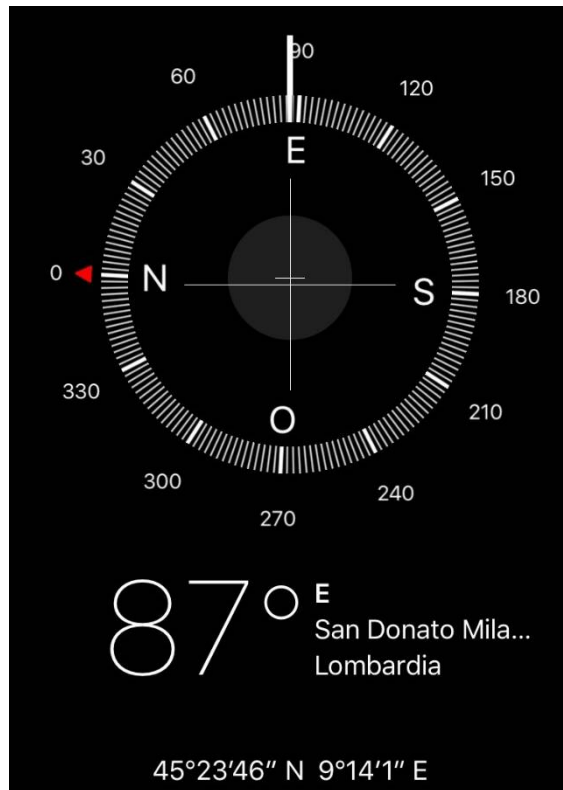




Fill the form

1. Identification: Yours and of the building

Geographical Coordinates (WGS 84 System)	Lat. <input type="text"/>
	Long. <input type="text"/>



For Geographical Coordinates (IOS):

- Tap on Settings, then tap Privacy
- Location Services ON
- Scroll down until **Compass** (Select “While Using”)
- Open the Compass App
- Read Lat and Long (45.2346, 9.1410)



Fill the form

1. Position of the Building

Position of Building :

1 Isolated Building
 2 Internal Building
 3 End Building
 4 Corner Building



To point out link/connection between buildings.

Useful element to understand structural interaction and evaluate vulnerability.



Fill the form

2. Description of Building

Metrics, Age of construction, Use – Exposure

2) Description of the Building										
Metrics				Age	Use - Exposure					
N° Total floors with basement	Average of floor height [m]	Average of floor area [m ²]		Construction and renovation [max 2]	Type of Use	N° units of use	% of Use	Occupants		
		A	I					100	10	1
<input type="radio"/> 1 <input type="radio"/> 9	1 <input type="radio"/> < 2.50	A <input type="radio"/> < 50	I <input type="radio"/> 401 ÷ 500	1 <input type="checkbox"/> ≤ 1919	<input type="checkbox"/> Housing	<input type="text"/>	A <input type="radio"/> > 65%	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/> 2 <input type="radio"/> 10	2 <input type="radio"/> 2.50 ÷ 3.50	B <input type="radio"/> 51 ÷ 70	L <input type="radio"/> 501 ÷ 650	2 <input type="checkbox"/> 19 ÷ 45	<input type="checkbox"/> Productive	<input type="text"/>	B <input type="radio"/> 30 ÷ 65%	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/> 3 <input type="radio"/> 11	3 <input type="radio"/> 3.51 ÷ 5.0	C <input type="radio"/> 71 ÷ 100	M <input type="radio"/> 651 ÷ 900	3 <input type="checkbox"/> 46 ÷ 61	<input type="checkbox"/> Trade	<input type="text"/>	C <input type="radio"/> < 30%	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/> 4 <input type="radio"/> 12	4 <input type="radio"/> > 5.0	D <input type="radio"/> 101 ÷ 130	N <input type="radio"/> 901 ÷ 1200	4 <input type="checkbox"/> 62 ÷ 71	<input type="checkbox"/> Offices	<input type="text"/>	D <input type="radio"/> Under Construction	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/> 5 <input type="radio"/> > 12	N° Basements	E <input type="radio"/> 131 ÷ 170	O <input type="radio"/> 1201 ÷ 1600	5 <input type="checkbox"/> 72 ÷ 81	<input type="checkbox"/> Public Service	<input type="text"/>	E <input type="radio"/> Unfinished	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/> 6		F <input type="radio"/> 171 ÷ 230	P <input type="radio"/> 1601 ÷ 2200	6 <input type="checkbox"/> 81 ÷ 91	<input type="checkbox"/> Deposit	<input type="text"/>	F <input type="radio"/> Abandoned	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/> 7	A <input type="radio"/> 0 C <input type="radio"/> 2	G <input type="radio"/> 231 ÷ 300	Q <input type="radio"/> 2201 ÷ 3000	7 <input type="checkbox"/> 91 ÷ 02	<input type="checkbox"/> Strategic	<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="radio"/> 8	B <input type="radio"/> 1 D <input type="radio"/> ≥ 3	H <input type="radio"/> 301 ÷ 400	R <input type="radio"/> > 3000	8 <input type="checkbox"/> ≥ 2002	<input type="checkbox"/> Touristic - Accomodation	<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>
					Property		A <input type="radio"/> Public	B <input type="radio"/> Private		





Fill the form

2. Description of Building

2) Description of the Building			
Metrics			
N° Total floors with basement	Average floor height [m]	Average floor area [m ²]	
<input type="radio"/> 1 <input type="radio"/> 9	1 <input type="radio"/> < 2.50	A <input type="radio"/> < 50	I <input type="radio"/> 401 - 500
<input type="radio"/> 2 <input type="radio"/> 10	2 <input type="radio"/> 2.50 ÷ 3.50	B <input type="radio"/> 51 - 70	L <input type="radio"/> 501 - 650
<input type="radio"/> 3 <input type="radio"/> 11	3 <input type="radio"/> 3.51 ÷ 5.0	C <input type="radio"/> 71 - 100	M <input type="radio"/> 651 - 900
<input type="radio"/> 4 <input type="radio"/> 12	4 <input type="radio"/> > 5.0	D <input type="radio"/> 101 - 130	N <input type="radio"/> 901 - 1200
<input type="radio"/> 5 <input type="radio"/> > 12		E <input type="radio"/> 131 - 170	O <input type="radio"/> 1201 - 1600
<input type="radio"/> 6	N° Basements	F <input type="radio"/> 171 - 230	P <input type="radio"/> 1601 - 2200
<input type="radio"/> 7	A <input type="radio"/> 0 C <input type="radio"/> 2	G <input type="radio"/> 231 - 300	Q <input type="radio"/> 2201 - 3000
<input type="radio"/> 8	B <input type="radio"/> 1 D <input type="radio"/> ≥ 3	H <input type="radio"/> 301 - 400	R <input type="radio"/> > 3000

- Total floors+basements: from foundation to attic (only if accessible).
- Basements: height above ground < 1/2 total height of floor.
- Average Floor Height: if substantial variation between floors → select height best approximates average height of all floors.
- Average Floor Area: if substantial variation between areas → select range best identifies average area of all floors.



Fill the form

2. Description of Building

Age	
Construction and renovation [max 2]	
1	<input type="checkbox"/> ≤ 1919
2	<input type="checkbox"/> 19 ÷ 45
3	<input type="checkbox"/> 46 ÷ 61
4	<input type="checkbox"/> 62 ÷ 71
5	<input type="checkbox"/> 72 ÷ 81
6	<input type="checkbox"/> 81 ÷ 91
7	<input type="checkbox"/> 91 ÷ 02
8	<input type="checkbox"/> ≥ 2002

Period in which building was built or when it has been subjected to a **significant restoration** (structural part).

Remember: max 2 choices!





Fill the form

2. Description of Building

Use - Exposure			
Type of Use	N° units of use	% of Use	Occupants
<input type="checkbox"/> Housing		A <input type="radio"/> > 65%	100 10 1 0 0 0
<input type="checkbox"/> Productive		B <input type="radio"/> 30÷65%	1 1 1
<input type="checkbox"/> Trade		C <input type="radio"/> < 30%	2 2 2
<input type="checkbox"/> Offices		D <input type="radio"/> Under Construction	3 3 3 4 4 4
<input type="checkbox"/> Public Service		E <input type="radio"/> Unfinished	5 5 5
<input type="checkbox"/> Deposit		F <input type="radio"/> Abandoned	6 6 6 7 7 7
<input type="checkbox"/> Strategic			8 8 8
<input type="checkbox"/> Touristic - Accomodation			9 9 9
Property		A <input type="radio"/> Public	B <input type="radio"/> Private

- Select all kind of use take place in bld and related no. of units.
- % Use: indicate % use for spatial and/or temporal term according to 3 levels or, if building is not used, choose between 3 alternatives.
- Occupants: average n° of persons usually presents.
- Type of Property: if public or private.



Fill the form

3. Structural Data

3) Structural Data			
Vertical Structure of the Building			
Masonry	Reinforced Concrete	If the building is in reinforced concrete:	
		B.1 <input type="checkbox"/> The building has no walls at floors: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> ≥12	B.2 <input type="checkbox"/> The building has partially walls at floors: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> ≥12
A ○	B ○	B.3 <input type="checkbox"/> The building is composed totally by walls	B.4 <input type="checkbox"/> The building has RC shear walls

- Choose if Vertical Structure is made of **MASONRY** or **R.C.**

- If **R.C.** → concentrate your attention on walls



Fill the form

3. Structural Data

B.1 No walls at one floor



B.2 Partially walls at four floors



B.3 Totally Walls



B.4 R.C. Shear Walls



Fill the form

3. Structural Data

Horizontal Structure				
Not identified	Solid slab with drop beams	Reinforced concrete ribbed slab	Reinforced concrete slab	Steel concrete slab
<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- If it is possible to understand the structure, choose between 4 horizontal typologies
- Otherwise, choose “Not Identified”



Fill the form

3. Structural Data

Roof			
Heavy and flat	Heavy and sloped	Light and flat	Light and sloped
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

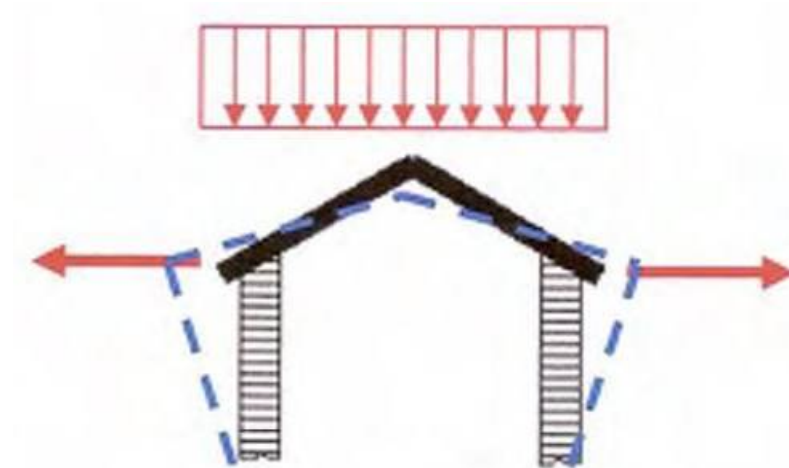
- **Heavy or Light Roof**
- Heavy Roof: reinforced concrete
- Light Roof: wood or steel (no plates/tiles like natural stones)

- **Flat or Sloped Roof:** specify if the roof is flat or sloped, if so it will transfer thrusts to the perimeter walls



Fill the form

3. Structural Data



Sloped roof (Thrusting)



Flat roof

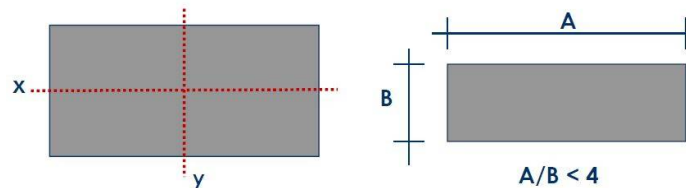
Fill the form

4. Regularity

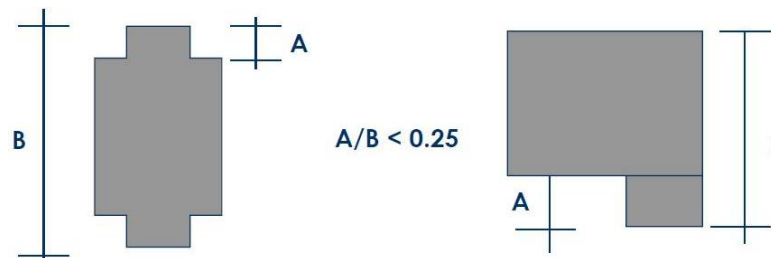
4) Regularity			
In plan		In elevation	
Regular	Not regular	Regular	Not regular
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Plan Regularity (§ 4.2.3.2 UNI EN 1998-1:2005)

- Structure approximately symmetrical in plan with respect to 2 orthogonal axes;



- Plan configuration compact (pay attention to re-entrant corners);



Fill the form

4. Regularity

Plan Regularity (§ 4.2.3.2 UNI EN 1998-1:2005)

- In-plan stiffness of floors > lateral stiffness of vertical structure (carefully examine L, C, H, I, X plan shape buildings);



- $\lambda = L_{\max}/L_{\min} < 4$ $e_{ox} \leq 0,30 \cdot r_x$ $r_x \geq I_s$

e_{ox} (eccentricity): distance between the center of stiffness and the center of mass, measured along the x direction;

r_x (torsional radius): the square root of the ratio of the torsional stiffness to the lateral stiffness in the y direction;

I_s : radius of gyration of the floor mass in plan.



Fill the form

4. Regularity

Plan Regularity (§ 4.2.3.2 UNI EN 1998-1:2005)



Regular in plan



Not regular in plan



Fill the form

4. Regularity

4) Regularity			
In plan		In elevation	
Regular	Not regular	Regular	Not regular
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Regularity in Elevation (§ 4.2.3.3 UNI EN 1998-1:2005)

- Lateral load resisting systems (cores, structural walls, frames) have **no** interruption from foundations to top;
- Lateral stiffness and mass of individual storeys constant or reduce gradually;
- Additional conditions when setbacks are present.



Fill the form

4. Regularity

Regularity in Elevation (§ 4.2.3.3 UNI EN 1998-1:2005)



Regular in elevation



Not regular in elevation



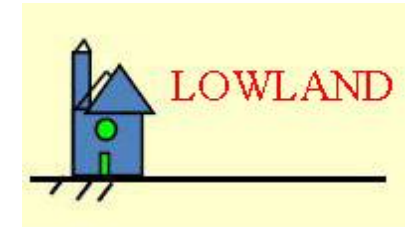
Fill the form

5. Geomorphological Data

5) Geomorphological Data						
Morphology site				Landslides		Category of soil foundation
Ridge	Strong slope	Slight slope	Lowland	Absent	Existing	
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>

Simple observation of **Morphology Site** of building surroundings:

- Ridge (high vulnerability), Strong Slope (foundation displacement), Slight Slope, Lowland;



Observe if landslide phenomena are present.



Fill the form

5. Geomorphological Data

Finally, according to the following table (§ 3.1.2 UNI EN 1998-1:2005), select the category of foundation:

Soil type	Description of stratigraphic profile	Parameters		
		$V_{S,30}$ (m/s)	N_{SPT} (blows/30 cm)	C_u (kPa)
A	Rock or other rock-like geological formation, including at most 5 m of weaker material at the surface.	>800	-	-
B	Deposits of very dense sand, gravel, or very stiff clay, at least several tens of metres in thickness, characterized by a gradual increase of mechanical properties with depth.	360-800	>50	>250
C	Deep deposits of dense or medium-dense sand, gravel or stiff clay with thickness from several tens to many hundreds of meters.	180-360	15-50	70-250
D	Deposits of loose-to-medium cohesionless soil (with or without Some soft cohesive layers), or of predominantly soft-to-firm cohesive soil.	<180	<15	<70
E	A soil profile consisting of a surface alluvium layer with v_s values of type C or D and thickness varying between about 5 m and 20 m, underlain by stiffer material with $v_s > 800$ m/s.			
S₁	Deposits consisting, or containing a layer at least 10 m thick, of soft clays/silts with a high plasticity index ($PI > 40$) and high water content	<100 (indicative)	-	10-20
S₂	Deposits of liquefiable soils, of sensitive clays, or any other soil profile not included in types A E or S ₁			



Fill the form

5. Geomorphological Data

The following table relates to Soil Classification of the Jordanian Building Code, very similar to UNI EN 1998-1:2005.

Soil type	Description of stratigraphic profile	Parameters		
		$V_{s,30}$ (m/s)	N_{SPT}	C_u (kPa)
S_A	Hard Rock	>1,500	-	-
S_B	Rock	760-1,500	-	-
S_C (B)	Very dense soil and soft rock	360-760	>50	>100
S_D (C)	Stiff soil profile	180 - 360	15 - 50	50 - 100
S_E (D)	A soil profile with $v_s < 180$ m/s or any profile with more than 10 ft. (3048 mm) of soft clay defined as soil with $PI > 20$, $w_{mc} \geq 40\%$ and $s_u < 500$ psf (25 kPa).	<180	<15	<50
S_F	Soils requiring site-specific evaluation. See Section 16329.3.1			



Fill the form

6. Notes

Optional Field, if you want to describe building's features in more details.

Remember the insertion of the date and your signature.

At the end of the form, quickly information and the meaning of each section are available.



Thank you for your attention!

