
BUILDING (BLOCK) INFORMATION

School Code			
Group ID			
Survey Start			
Building (block) ID		Number of classrooms	
Minimum 1 photo for the typical classroom			
Main functionality of the building (block)			
<input type="checkbox"/>	Classroom	<input type="checkbox"/>	Canteen
<input type="checkbox"/>	Bathroom	<input type="checkbox"/>	Auditorium
<input type="checkbox"/>	Transition	<input type="checkbox"/>	Other specify
Have any additions or extensions to the building (block) been made since it was built?		<input type="checkbox"/>	Yes
		<input type="checkbox"/>	No
When was the addition or extension made?			
<input type="checkbox"/>	Before 1950	<input type="checkbox"/>	1950 - 1959
<input type="checkbox"/>	1970 - 1979	<input type="checkbox"/>	1980 - 1989
<input type="checkbox"/>	2000 - 2009	<input type="checkbox"/>	2010 and After

Parameter 0: Building Category

Building Category	
<input type="checkbox"/>	LBM: Load Bearing Masonry
<input type="checkbox"/>	RC: Cast-in-place Reinforced Concrete
<input type="checkbox"/>	PC: Precast Reinforced Concrete
<input type="checkbox"/>	SF: Steel Frame
<input type="checkbox"/>	T: Timber
<input type="checkbox"/>	Mixed Systems
<input type="checkbox"/>	Under Construction
<input type="checkbox"/>	Other specify

Parameter 1: Main Structural System

Minimum 4 photos to capture each side of the building (block). Each photo should capture an overall view of the whole façade.

Select the Main Structural System	
	A: Adobe - Earthen bricks/blocks or compressed stabilized soil bricks/blocks in mud mortar
	UCM-URM1: Dry stone masonry (without mortar)
	UCM-URM2: Rubble (or field) stone in mud mortar
	UCM-URM3: Dressed stone in mud mortar
	UCM-URM4: Bricks/blocks in mud mortar
	UCM-URM5: Rubble (or field) stone in cement mortar
	UCM-URM6: Dressed stone in cement mortar
	UCM-URM7: Bricks/blocks in cement mortar
	CM: Confined masonry with bricks/blocks in cement mortar wall with horizontal and vertical RC elements
	CX: Complex masonry with bricks/blocks masonry walls reinforced with vertical RC inclusions and horizontal reinforcement
	CXCF: Complex masonry walls and RC frames
	RM1: Reinforced masonry with bricks/blocks in cement mortar wall with horizontal and vertical steel reinforcement
	RM2: Reinforced masonry with bricks/blocks and horizontal RC bands
	SFM1: Light steel frame with stone in mud mortar walls
	SFM2: Light steel frame with bricks/blocks in mud mortar walls
	SFM3: Light steel frame with stone in cement mortar walls
	SFM4: Light steel frame with bricks/blocks in cement mortar walls
	SFM5: Light steel frame with confined masonry walls
	SFM6: Light steel frame with reinforced masonry walls
	TFM: Lightweight gravity timber frame with URM walls

LBM: Load Bearing Masonry

	RC1: Bare frame (with/without infill walls that do not contribute to lateral stiffness)
	RC2: Infilled frame (infill walls act as stiffening elements)
	RC4: Dual or combined system comprising frames and structural walls
	RC5: Non-engineered frame
	PC1: Precast large panel reinforced concrete wall system

RC: Cast-in-place Reinforced Concrete

PC: Prec Reinforc	PC2: Precast reinforced concrete frames with exterior precast reinforced concrete wall panels				
	PC3: Precast reinforced concrete frames with masonry infill walls				
SF: Steel Frame	SF1: Steel moment resisting frame with masonry infill walls				
	SF2: Steel moment resisting frame with lightweight infill panels				
	SF3: Braced steel frame				
I: Timber	TF: Timber frames				
	TW: Timber walls (wooden plank or log buildings)				
Other specify					
Bricks/blocks material					
	Clay		Concrete		Silicate
	Other specify				

Parameter 2: Height Range

Number of stories							
Basement			Partial		Yes		No
Minimum 1 photo of the partial basement - Minimum 1 photo of the basement							
Please specify the basement height (m)			Insert the height of 1st story (m)				
Insert the height of 2nd story (m)			Insert the height of 3rd story (m)				
Insert the height of 4th story (m)			Insert the height of 5th story (m)				
Insert the height of 6th story (m)			Insert the height of 7th story (m)				
Insert the height of 8th story (m)			Insert the height of 9th story (m)				
Insert the height of 10th story (m)							

Parameter 3: Seismic Design Level

Minimum 4 photos about the main lateral load resisting system, their connections, sizes, etc.					
Building (block) construction year (approximate)					
	Before 1950		1950 - 1959		1960 - 1969

	1970 - 1979		1980 - 1989		1990 - 1999
	2000 - 2009		2010 and After		_____
Select who is responsible for the building's construction					
	National government		Subnational government		NGO or donors
	Community		Don't know		
	Other specify				
Typical size of RC confinement elements: width (m)			Typical size of RC confinement elements: depth (m)		
Typical spacing of horizontal RC confinement (m)			Typical spacing of vertical RC confinement (m)		
Do you have a metal detector?			Yes		No
Vertical reinforcement spacing in walls (m)			Horizontal reinforcement spacing in walls (m)		
Transverse reinforcement spacing in RC columns (m): towards connection					
Seismic design level					
	Poor Design: Non-engineered building or designed only for gravity loading. / Poor quality of construction.				
	Low Design: Designed according to a force-based seismic code. / Low quality of construction.				
	Medium Design: Designed according to a force-based seismic code. / Medium quality of construction. / Seismic enhancement measures.				
	High Design: Designed according to the latest seismic code with design provisions reflecting state-of-the art seismic design practice of ductile detailing for good seismic performance, as				

Presence of Seismic Enhancement Measures (specify)	
	Evidence of internal vertical and/or horizontal reinforcement in masonry walls
	Evidence of vertical and/or horizontal confining RC elements at distances no more than about 4 m (already a typology, i.e. CM)
	Presence (and connection to wall) of gravity columns (timber, steel, RC) at corners
	Presence of horizontal ring beam (timber, RC or steel) at floor level for box action
	Presence of horizontal ring beam (timber, RC or steel) well connected to the floor/roof structure
	Presence of lintel band beam (RC, timber or steel)
	Presence of sill level band beam (RC, timber or steel)

	Presence of intermediate ties/stitches (RC, timber or steel) at corners
	Presence of regularly spaced corner and through stone in stone masonry walls
	Presence of light material gable walls (wooden planks or CGI sheet) in LBM buildings
	Presence of ties, anchors in the wall to floor/roof connection
	Presence of quoin in masonry structures at the corners
	Presence of reinforcements at the corner region (for stronger cross walls connection)
	Presence of anchored ties (RC, timber or steel) connecting parallel walls
	Presence of horizontal grouted beams at regular spacing in reinforced masonry walls
	Presence of buttresses in masonry walls with long unrestrained panels
	None
	Other specify

Parameter 4: Diaphragm Type

Minimum 4 photos: 1 for typical floor, 1 for the connection of the floor with the lateral resisting system, 1 for the roof structure including the roof covering, 1 for the connection of the roof structure with the load-bearing system.
Minimum 1 photo: Roof from outside
Minimum 1 photo: Roof from inside

Roof: Type of structure	
Timber structure without horizontal bracing or ring beam	Timber structure with horizontal bracing or ring beam
Precast RC slabs (hollow core or ribbed) without RC topping	Precast RC slabs (hollow core or ribbed) with RC topping
RC solid slab	RC two-way joists slab
RC one-way joists in longitudinal direction	RC one-way joists in transversal direction
Steel truss structure	Steel deck with concrete slab
Steel deck without concrete slab	
Other specify	
Roof: Connection to the lateral load resisting system	

	Monolithic or embedded		Resting over the lateral resisting system (no or poor connection)	
	Evidence of positive connection (for in-plane and out-of-plane forces)		Don't know	
	Other specify			
Roof: Coverings				
	Heavy (e.g. ceramic tiles/corrugated board asbestos)		Light (e.g. CGI sheets)	Not Applicable
Type of roof				
	Flat		Hip	Gable
	Mansard		Other specify	
Specify the angle of the roof slope in degrees				
Connection of covering to roof structure				
	Nail		Bolt & Nut	Metal Strips
	None		Other specify	
Select type of roof overhangs			Yes, on all sides	Yes, but partial
				No
Estimate the average length of the overhangs (m)				
Roof condition			Fair/Good	Deteriorated
				Not visible
Does the roof have openings?			Yes	No
Estimate percentage of openings on the roof (%)				
Floors: Type of structure				
	Timber structure without horizontal bracing or ring beam		Timber structure with horizontal bracing or ring beam	
	Precast RC slabs (hollow core) without RC topping		Precast RC slabs (hollow core) with RC topping	
	RC solid slab		RC two-way joists slab	
	RC one-way joists in longitudinal direction		RC one-way joists in transversal direction	
	Steel structure without horizontal bracing or ring beam		Steel structure with horizontal bracing or ring beam	
	Steel deck with concrete slab		Steel deck without concrete slab	
	Other specify			
Floors: Connection to the lateral load resisting system				
	Monolithic or embedded		Resting over the lateral load resisting system (no or poor connection)	

Evidence of positive connection (for in-plane and out-of-plane forces)	Don't know
Other specify	

Parameter 5: Structural Irregularity

Minimum 2 photos for the horizontal and/or vertical irregularity (photo of sketches applies)			
Plan shape of the building (block)			
Rectangular	L-shaped	T-shaped	
H-shaped	U-shaped	Asymmetrical	
Other specify			
Vertical Irregularity			
Soft or weak story	Variation in story height	Variation in story mass	
Discontinuity in vertical elements	Setback irregularity	None	
Other specify			
1st story: foot print total longitudinal length (m)		1st story: foot print total transverse length (m)	
1st story: total number of bays in the longitudinal direction		1st story: total number of bays in the transverse direction	

Parameter 6: Wall Panel Length or Span Length

Minimum 2 photos: 1 internal and 1 external photo of the typical panel and/or span length			
Typical external wall (load bearing wall) length in longitudinal direction between adjacent restricted borders (m)			
Typical external wall (load bearing wall) length in transverse direction between adjacent restricted borders (m)			
Typical interior wall (partition wall) length in longitudinal direction between adjacent restricted borders (m)			
Typical interior wall (partition wall) length in transverse direction between adjacent restricted borders (m)			
Typical external wall (load bearing wall) total thickness (m)			
Thickness of the masonry unit of the typical external wall (m)			
How many wythe does the typical external wall have?	Single	Double	
	Other specify		
Typical interior wall (partition wall) thickness (m)			

Typical bay length between columns in longitudinal direction (m)	
Typical bay length between columns in transverse direction (m)	

Parameter 7: Wall Openings or Pier Type

Minimum 2 photos for the wall with the typical opening/s or the typical column and beam size			
Typical size of window opening: width (m)		Typical size of window opening: height (m)	
Typical size of door opening: width (m)		Typical size of door opening: height (m)	
Typical column width (m)		Typical column depth (m)	
Typical beam width (m)		Typical beam depth (m)	

Parameter 8: Foundation Type

Foundation structure			
	Reinforced concrete shallow foundation (i.e. isolated spread footing, combined footing,		Reinforced concrete shallow foundation (mat footing)
	Stonework strip footing		Brickwork strip footing
	Deep foundation (e.g. pile)		Don't know
	Other specify		
Crawl space		Yes	No
Minimum 1 photo of the connection between the foundation and vertical elements, and/or crawling space			
Soil Type			
	Hard		Medium
	Soft		Don't know
	Other specify		

Parameter 9: Seismic Pounding Risk

Does the school have seismic pounding risk?		Yes	No
Minimum 1 photo showing the two adjacent buildings (blocks) with the space between them			
Minimum building (block) separation (m)		Total height of the shorter building (block) (m)	
Is there story floor/roof misalignment between the 2		Yes	No
Estimate the maximum vertical misalignment distance (m)			

Parameter 10: Seismic Retrofitting

Has the structure been seismically retrofitted?		Yes	No
Minimum 2 photos for retrofitting details (if retrofitted)			
Year of retrofitting			
Before 1950	1950 - 1959	1960 - 1969	
1970 - 1979	1980 - 1989	1990 - 1999	
2000 - 2009	2010 and After		
What was the retrofitting intervention?			
Seismic belt around openings	Rebuilding portion of walls		
Wire/polymer meshing to wall	Vertical steel reinforcement to wall		
Vertical reinforced concrete inclusions at corners	Vertical reinforcement at corners		
Column (steel, timber, bamboo) strongbacks	Buttresses to support out-of-plane vulnerability		
Addition of horizontal ring beams (seismic belts) in reinforced concrete	Addition of horizontal ring beams (seismic belts) in steel		
Addition of horizontal ring beams (seismic belts) in timber	Gable wall framing beams		
Improving the floor/roof (especially timber) to wall connection (using ties, stitches, Use of Tarpaulin stipes in stone masonry walls	Gabion wire mesh and wooden posts/bandage in stone masonry walls		
Reinforced concrete jacketing of columns and other elements	Wall jacketing		
Fiber reinforced polymer (FRP) jacketing of columns	Steel jacketing of columns and other elements		
Addition of steel braces	Addition of reinforced concrete shear walls		
Reinforcement with welded wire mesh	Strengthening to foundation		
Post tensioning	Bamboo reinforcing		
Other specify	External cane and rope mesh		
Responsible of seismic retrofitting			
National government	Subnational government	NGO or donors	
Community	Don't know		
Other specify			
Are retrofit drawings available?		Yes	No
Take good resolution photos of the retrofit drawings			

Parameter 11: Structural Health Condition

Are there any critical conditions observed?		Yes		No		
Select the type of structural critical conditions observed						
	Structural cracking (walls and/or columns or beams)		Corner separation			
	Foundation settlement		Corrosion of steel rebar/members			
	Poor quality of materials in lateral load resisting elements (wall or frame elements)		Poor quality of construction in lateral load resisting elements (wall or frame elements)			
	Poor quality of materials in floor or roof elements		Poor quality of construction in floor or roof elements			
	Structural deflection		Masonry efflorescence			
	Covering or plaster cracking/detachment		None			
	Other specify					
Minimum 2 photos for each structural critical condition observed: 1 to identify the type, 1 to identify the extent						
Indicate the extent of the other critical condition observed		Minor		Moderate		Severe

Parameter 12: Vulnerable Non-Structural Components

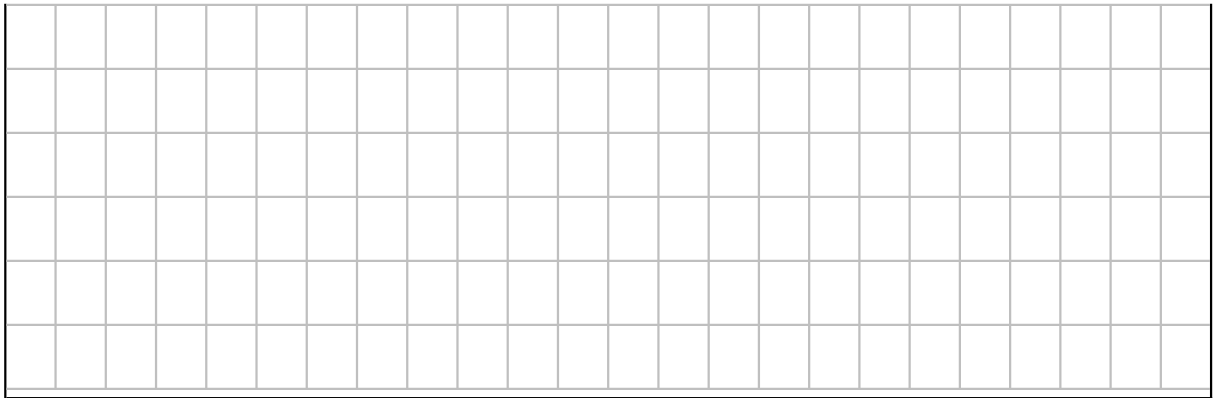
Parapets - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Gables - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Overhangs - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Roof coverings - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Ceilings - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Bookshelves - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Partitions - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable

HVAC Components - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Precast reinforced concrete exterior wall panels - Minimum 1 photo of each element with the worst condition		Poor		Fair
		Good		Not Applicable
Are there any other vulnerable non-structural components?		Yes		No

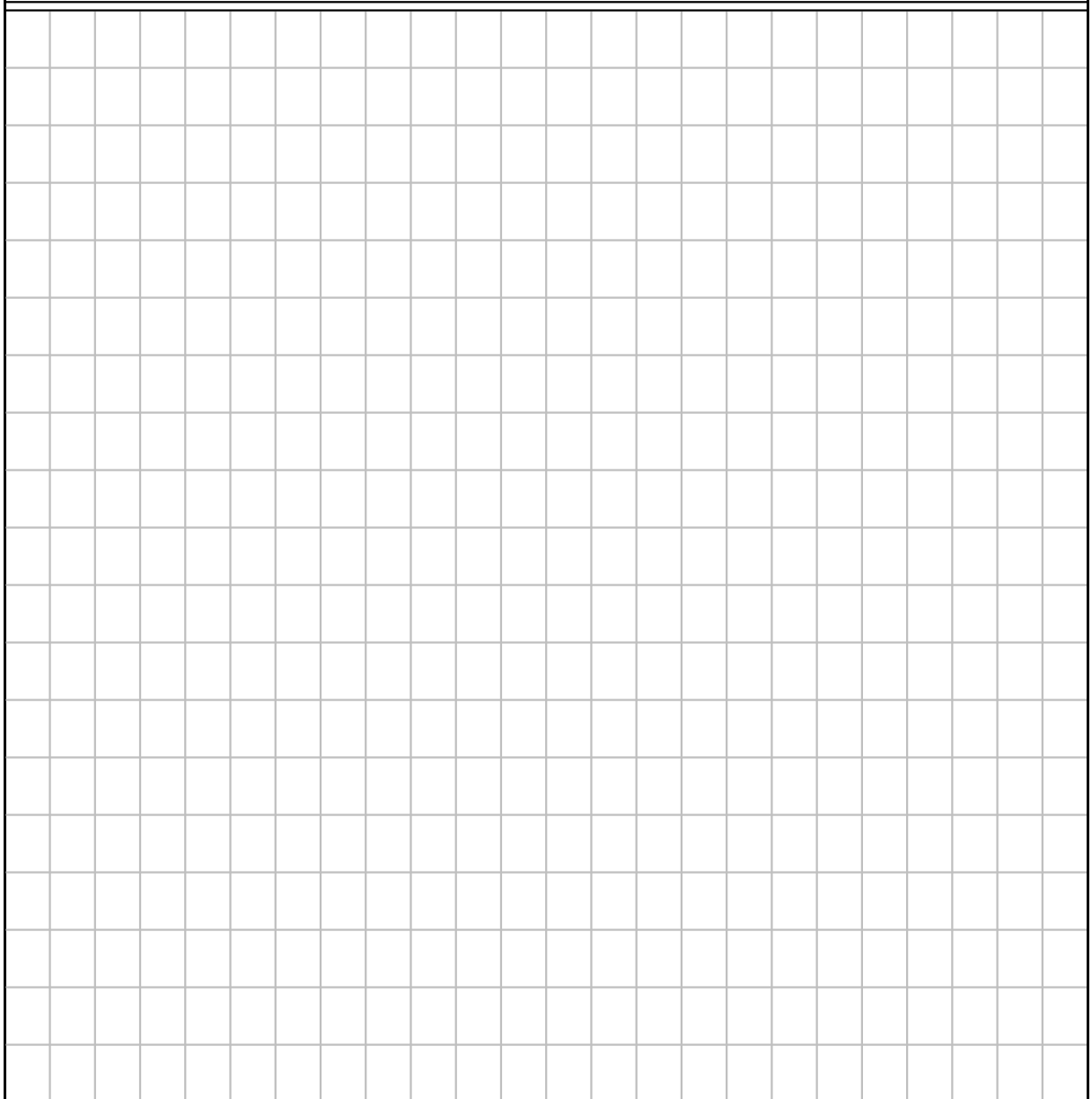
Specify the vulnerable non-structural component - Specify the condition of the component	_____			
		Poor		Fair
Specify the vulnerable non-structural componentv (additional) - Specify the condition of the component	_____			
		Poor		Fair
		Good		Not Applicable

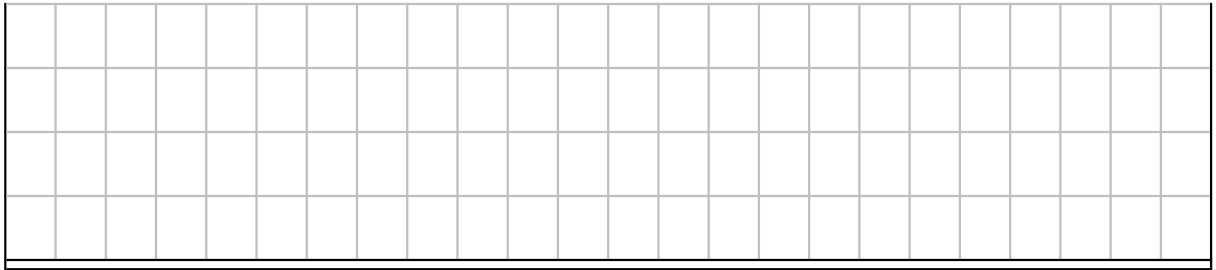
SKETCH OF THE BUILDING (BLOCK)

<p>Sketch and photograph the plan of building (block) layout, in red specify the retrofitting if any exists and take a photo of the sketch. Please mark key plan dimensions, including length, width, distance between columns/bays/load bearing walls.</p>																			

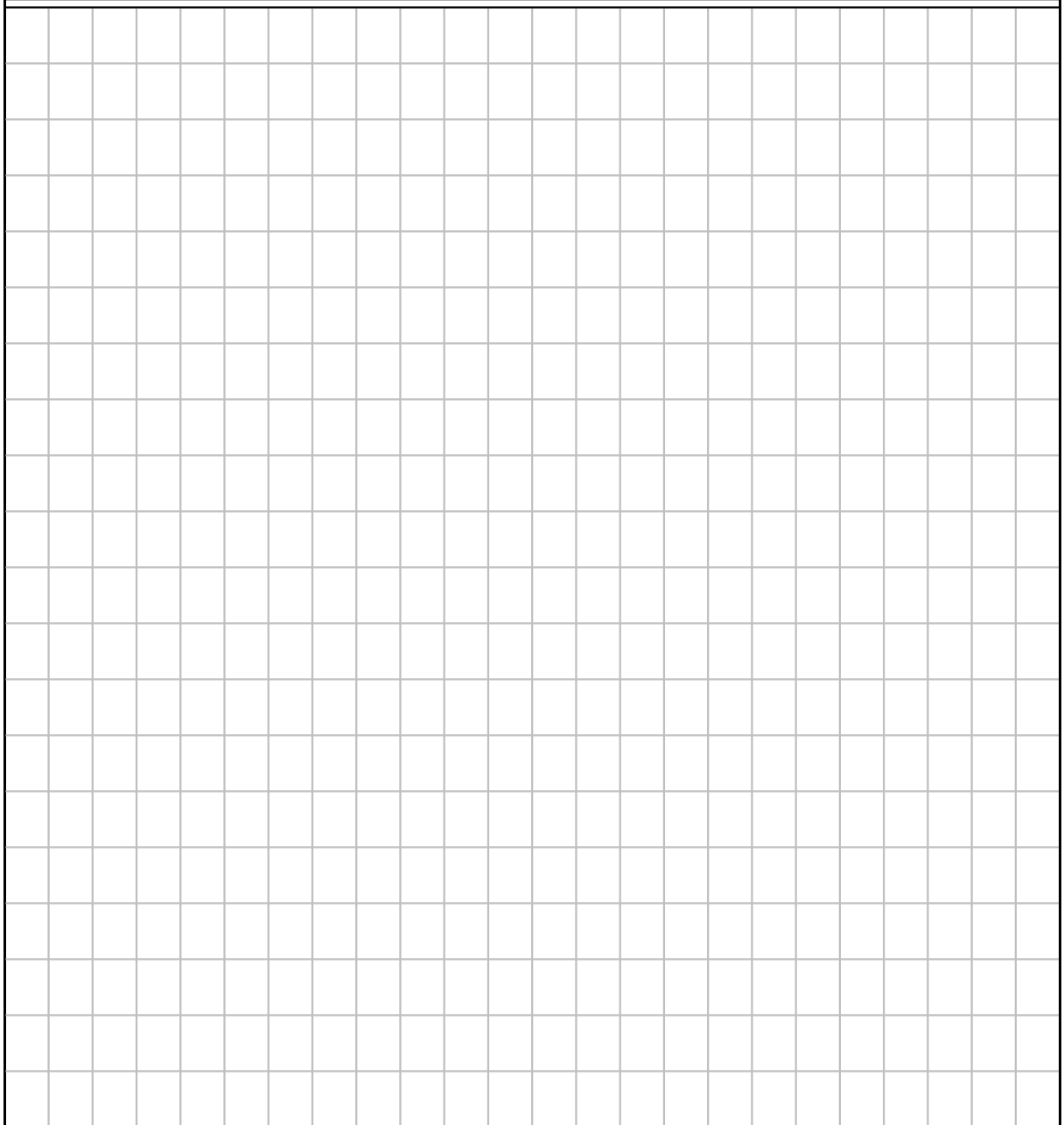


Sketch and photograph the elevation in longitudinal direction, in red specify the retrofitting if any exists. Please mark key dimensions, including length, height, distance between columns/bays/load bearing walls.





Sketch and photograph the elevation in transverse direction, in red specify the retrofitting if any exists. Please mark key dimensions, including length, height, distance between columns/bays/load bearing walls.



ENERGY EFFICIENCY PER BUILDING (BLOCK)

Building Envelop

Wall insulation		Yes		No
Rainwater drainage at ground level		Yes		No
Drainage condition at ground level		Poor		Fair
		Good		Not Applicable
Rainwater drainage at roof level		Yes		No
Drainage condition at roof level		Poor		Fair
		Good		Not Applicable
Roof cover material				
	Ceramic tiles		Asbestos sheets	
	Don't know		Other specify	
Are there any leakages in the roof?		Yes		No
Type of window frame				
	Wooden		PVC	
	Other specify			
Type of window glassing		Single		Double
		Triple		None
Window condition		Poor		Fair
		Good		Not Applicable
Typical external door material				
	Wooden		PVC	
	None		Other specify	

Door condition		Poor		Fair
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DOOR CONDITION		Good		Not Applicable
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Heating and Ventilation

Heating source				
	Coal		Electricity	
	Natural gas		Solar	
	Other specify			
Minimum 1 photo for the heating source and condition				
Heating mode				
	Individual		Centralized	
	Other specify			
Heating system general condition			Poor	
			Good	
Is ventilation system available?			Yes	
If possible, take one or more photos of the ventilation system				
Are there any cooling devices?			Yes	
Minimum 1 photo for the cooling device				
Is there any hot water supply?			Yes	

Lighting and Equipment

Classroom lighting condition			Poor	
			Good	
Minimum 1 photo for the typical classroom lighting				

General condition of classroom equipment			Poor	
			Good	
			Fair	
			Not Applicable	

Minimum 1 photo for the typical classroom equipments			
General condition of kitchen equipment		Poor	Fair
		Good	Not Applicable
Minimum 1 photo for the kitchen equipment			