

1. Hazard Assessment

FLOODLABEL_{GHANA}

Flood Competence Center (HKC)

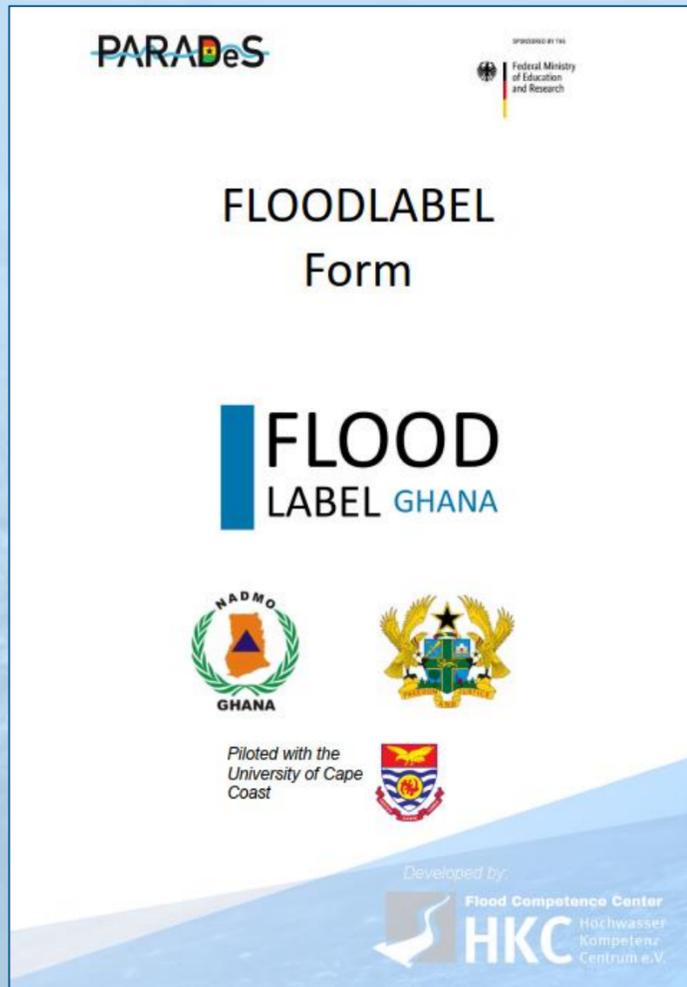
October 2023

CONTENT



- FLOODLABEL Form
- Pluvial Flooding
- Fluvial Flooding
- Coastal Flooding

FLOODLABEL FORM



Some general information needs to be added:

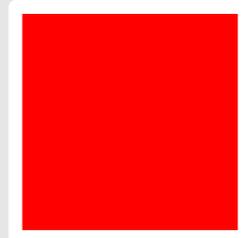
- FLOODLABEL Expert

FLOODLABEL Form

FLOODLABEL Expert
Name and Date:

FLOODLABEL FORM

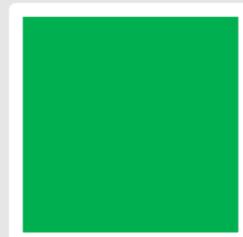
Assessment Categories



High Risk



Medium Risk



No Risk



FLOODLABEL FORM



Some general information needs to be added:

- Address of the property

Address of the property

Street, House number:

City, District, Region:

Postcode:

Hazard Assessment

Step 1: Pluvial Flooding

FLOOD HAZARDS

Pluvial Flooding



STEP 1

Pluvial Flooding

Topographical conditions like depressions and slopes must be considered.

Is the building located in a depression?

If the answer is **yes**:

the building must be categorized as "**high risk**".

The risk is categorized as high because surface runoff follows the slope and thus accumulates in depressions.

If the answer is **NO**, slopes are investigated.

In a depression?

pluvial flooding

Yes (red)

No

STEP 1

Pluvial Flooding

Is the building located on a slope?

If the answer is **yes**:

the building must be categorized as "**high risk**".

Surface runoff water flows downwards according to the slope.

If the answer is **No**:

On the slope?

pluvial flooding

Yes (red)

No

STEP 1

Pluvial Flooding

The course of the road is evaluated at the building.

If the street slopes towards the house, surface runoff is directed to the building....

Streets sloping towards property?

pluvial flooding

- Yes (red)
- No (yellow)

If the answer is **yes**:

the building must be categorized as "**high risk**".

If the answer is **no**:

the building must be categorized as "**medium risk**".

STEP 2

Pluvial Flooding



Street sloping towards property?

STEP 2

Pluvial Flooding



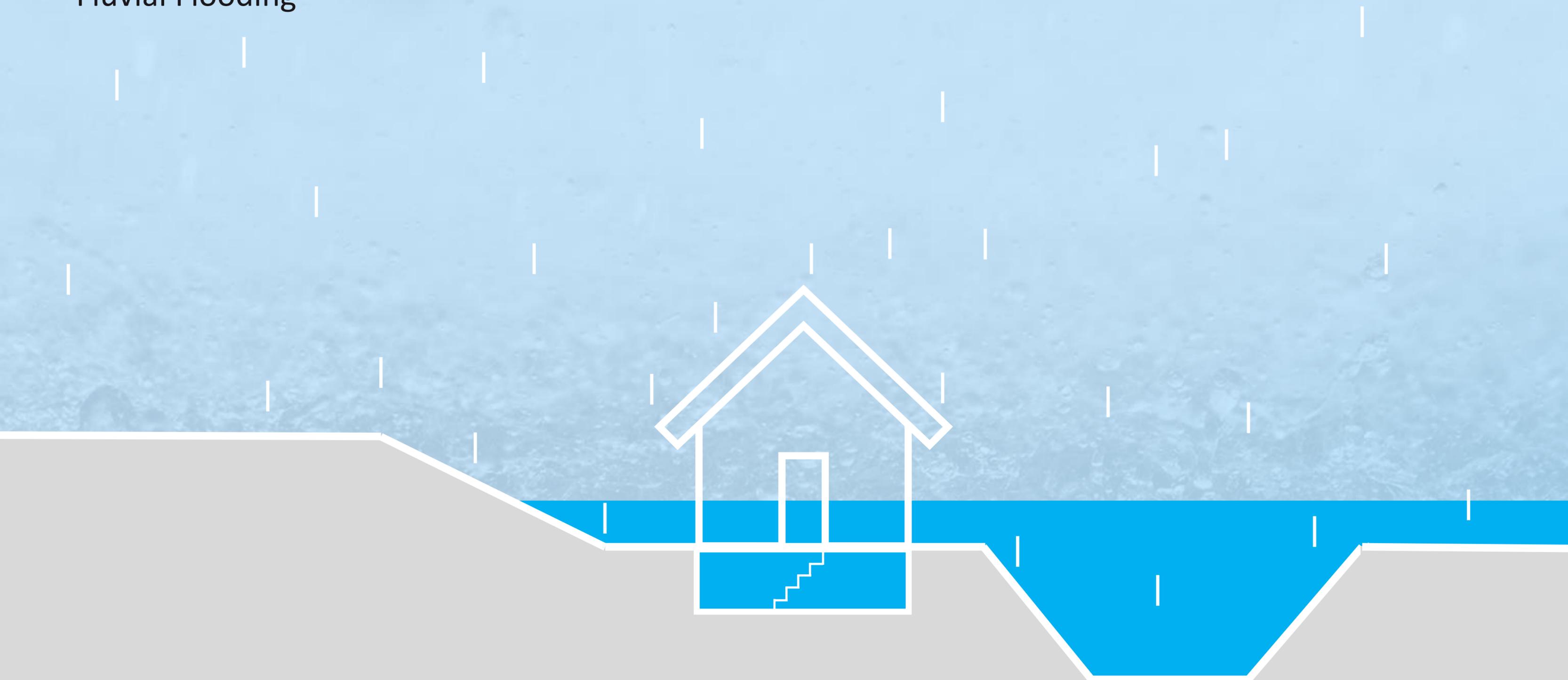
Street sloping towards property?

Hazard Assessment

Step 2: Fluvial Flooding

FLOOD HAZARDS

Fluvial Flooding



STEP 2

Fluvial Flooding

Look at the surroundings:

Is there a body of water nearby?

Location near waterbody?

fluvial flooding

No (green)

Yes

If the answer is **no**:

the building must be categorized as “**no risk**”.



STEP 2

Fluvial Flooding

If the answer is yes:

How high is the building located?

fluvial flooding

- Under 2 metres (red)
- Over 2 metres (yellow)

WATER LEVEL

Water level

Maximum water level?

- Ankle-high
- Knee-high
- Waist-high

Historical knowledge

(year of construction, previous damage ...)

e.g., from a flood mark



FLOODLABEL FORM

Some general information needs to be added:

- Building information

Basement?

- Yes
- No

Building type?

- Single storey mud building
- Single storey cement building
- Single storey walled cement building
- Multi storey building cement building
- Multi storey building cement building walled
- Compound house

FLOODLABEL CERTIFICATE



FLOOD LABEL GHANA

ADDRESS

DIGITAL ADDRESS: _____

STREET: _____

HOUSE NR: _____

POST CODE: _____

CITY: _____

DISTRICT: _____

REGION: _____

BUILDING INFORMATION

BUILDING TYPE: _____

BASEMENT: No: Yes:



Your Flood Risk

This FLOODLABEL shows the current hazard situation and flood risk for the building by visual inspection. For further details on the recommended measures please refer to the Measure Booklet.



Hazard Type	no medium high			Flood Risk	no medium high		
Pluvial Flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roof	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluvial Flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Flooding	<input type="checkbox"/>			Wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				Sewer System	<input type="checkbox"/>		<input type="checkbox"/>

Final Score



Fixed Water Levels 0,5 m

The house is protected to a water level of: 1 m

DATE OF ISSUE

SIGNATURE

FLOODLABEL CERTIFICATE



Your Flood Risk

This FLOODLABEL shows the current hazard situation and flood risk for the building by visual inspection. For further details on the recommended measures please refer to the Measure Booklet.



ADDRESS

DIGITAL ADDRESS: _____
 STREET: _____
 HOUSE NR: _____
 POST CODE: _____
 CITY: _____
 DISTRICT: _____
 REGION: _____

BUILDING INFORMATION

BUILDING TYPE: _____
 BASEMENT: No: Yes:

Hazard Type

	no	medium	high
Pluvial Flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluvial Flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Flooding	<input type="checkbox"/>		

Flood Risk

	no	medium	high
Roof	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sewer System	<input type="checkbox"/>		<input type="checkbox"/>

Final Score



Fixed Water Levels

The house is protected to a water level of:

0,5 m
 1 m

DATE OF ISSUE _____

SIGNATURE _____



Piloted with the
University of
Cape Coast



COASTAL FLOODING



Protection of coastal buildings must be integrated into an overall strategy.

Within the FLOODLABEL concept:

Affected houses can be identified, but recommendations beyond behavioral precautions cannot be given here.

FLOOD LABEL GHANA

ADDRESS

DIGITAL ADDRESS: _____
STREET: _____
HOUSE NR: _____
POST CODE: _____
CITY: _____
DISTRICT: _____
REGION: _____

BUILDING INFORMATION

BUILDING TYPE: _____
BASEMENT: No: Yes:

Your Flood Risk

This FLOODLABEL shows the current hazard situation and flood risk for the building by visual inspection. For further details on the recommended measures please refer to the Measure Booklet.

Developed by: **Flood Competence Center HKC** Hochwasser Kompetenz Centrum e.V.

Hazard Type	no medium high			Flood Risk	no medium high		
	no	medium	high		no	medium	high
Pluvial Flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Roof	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fluvial Flooding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastal Flooding	X			Wall	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				Sewer System	<input type="checkbox"/>		<input type="checkbox"/>

Final Score

Fixed Water Levels 0,5 m
The house is protected to a water level of: 1 m

DATE OF ISSUE: _____ SIGNATURE: _____

Logos: WADMO GHANA, Ghana National Coat of Arms, University of Cape Coast

FLOODLABEL

KNOW YOUR RISK AND PROTECT YOUR PROPERTY

floodlabel.info

Contact us!

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Flood Competence Center (HKC)
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