Minor Extension Flood Risk Assessment Proforma

This form is for Minor Extensions in Flood Zone 2 or Flood Zone 3.

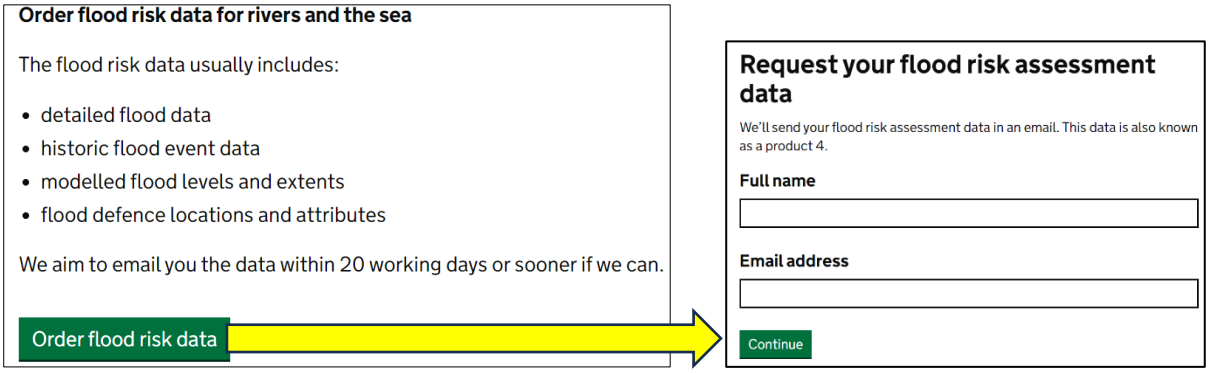
A Minor Extension is a household extension or non-domestic extension less than 250 square metres.

Government Guidance requires Manchester City Council to assess Minor Extensions in line with the Standing Advice for Minor Extensions.

Flood risk consultants or other appropriate professionals can complete this form.

1: ORDER THE ESTIMATED FLOOD LEVEL FOR THE SITE

Go to flood map for planning service[1] and follow the instructions to draw your site boundary and request Product 4 data for your site:



2: USE PRODUCT 4 TO IDENTIFY THE ESTIMATED FLOOD LEVEL FOR THE SITE

Use the Climate Change Allowances service[2] to identify the correct Climate Change allowance for your site. This is the **2080s Central Allowance** – the value will be either **35%** or **41%** depending on the site location.

☑ The Climate Change allowance is 35 %

Use your Product 4 data to determine if your site is affected by the 1% AEP + Climate Change allowance.

Guidance on using your Product 4 data is appended to this form.

☑ The site **is** affected by the 1% AEP + Climate Change allowance and the estimated flood level is 23.46 m aodN: **Proceed to Section 3.**

OR

☐ The site **is not** affected by the 1% AEP + Climate Change allowance. **Proceed to Section 5 (Skip Sections 3 & 4).**

3: PROPOSED FINISHED FLOOR LEVELS FOR THE EXTENSION

The finished floor levels will be:

☐ No lower than existing floor levels: **Proceed to Section 4.**

OR

☑ 300 millimetres (mm) above the estimated flood level: **Proceed to Section 5 (skip Section 4).**

4: ASSESSMENT OF RESISTANCE AND RESILIENCE MEASURES

If you cannot raise the floor levels 300 mm above the estimated flood level, you will need to include extra flood resistance and resilience measures.

These measures should protect the property to at least 300mm above the estimated flood level.

You will also need to use flood resistant materials up to at least 300mm above the estimated flood level.

Flood water can put pressure on buildings, causing structural issues. If your design aims to keep out a depth of more than 600mm of water, you should get advice from a civil/structural engineer.

☑ Provide details of the **flood resistance and resilience measures** to be included. These must be compliant with the Standing Advice for Minor Extensions[3]. Government-recognised resistance and resilience measures are detailed in the section: Extra Resistance and Resilience measures[4].

OS data shows proposed extension well above 300mm above 23.46 m aodN

Despite this, extra flood resistance measures to be taken include:
- Construction with flood resistant materials with low permeability
- Incorporation of low level flood barriers in external doors
- Non-return valves to new drainage outlets
- Electrical sockets and wiring to be installed appropriate height above floor level
- Ensuring access to all spaces to enable drying and cleaning

5: CONFIRM YOU HAVE ENCLOSED THE REQUIRED INFORMATION AND SUBMIT

☑ Completed Minor Extension Flood Risk Assessment Proforma

☑ Product 4 data attached. Please note that if the Product 4 data is not attached, the application will be returned. The Environment Agency require time to process orders; we recommend you order the data as soon as possible to avoid delays to your application.

Footnotes:

[1] https://flood-map-for-planning.service.gov.uk/

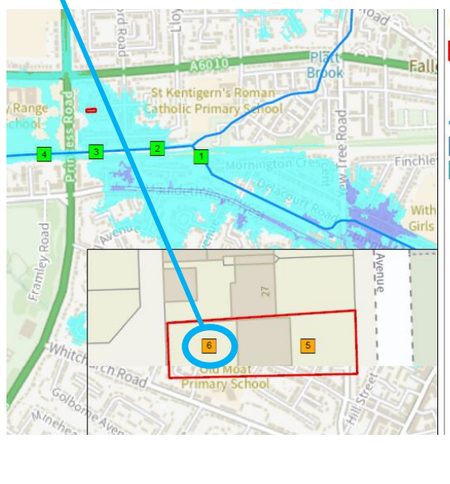
[2] https://environment.data.gov.uk/hydrology/climate-change-allowances/river-flow

[3] https://www.gov.uk/guidance/flood-risk-assessment-standing-advice#advice-for-minor-extensions

[4] https://www.gov.uk/guidance/flood-risk-assessment-standing-advice#standing-advice-for-vulnerable-developments

					Undefended											
Map Reference	Model Node Reference	Easting	Northing	Data	50 % AEP (1 in 2 year)	20 % AEP (1 in 5 year)	10 % AEP (1 in 10 year)	5 % AEP (1 in 20 year)	4 % AEP (1 in 25 year)	2 % AEP (1 in 50 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	1 % AEP (1 in 100 year) + 30% increase in flow	1 % AEP (1 in 100 year) + 35% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow	0.5 % AEP (1 in 200 year)
1	ea013_0238_CRIN01_4813	388294	392985	Modelled Water Level (m aodN)	60.72	60.81	60.87	60.94	60.97	61.06	61.10	61.15	61.30	61.33	61.48	61.24
				Modelled Flow (cumecs)	1.64	2.02	2.29	2.65	2.81	3.37	3.61	3.94	5.10	5.30	6.68	4.59
2	ea013_0238_CRIN01_4375	387986	393151	Modelled Water Level (m aodN)	57.45	57.64	57.70	57.74	57.76	57.80	57.83	57.85	57.93	57.94	58.02	57.90
				Modelled Flow (cumecs)	1.67	2.05	2.41	2.77	2.91	3.51	3.77	4.11	5.36	5.57	7.03	4.82
3	ea013_0238_CRIN01_3804d	387573	393331	Modelled Water Level (m aodN)	52.03	52.14	52.23	52.30	52.32	52.42	52.45	52.48	52.60	52.62	52.72	52.56
				Modelled Flow (cumecs)	1.67	2.17	2.64	3.02	3.15	3.69	3.90	4.08	4.90	5.02	5.74	4.58
4	ea013_0238_CRIN01_3176i	387120	393607	Modelled Water Level (m aodN)	47.85	47.96	48.07	48.16	48.18	48.27	48.34	48.38	48.57	48.59	48.65	48.52
				Modelled Flow (cumecs)	1.77	2.29	2.82	3.19	3.30	3.74	3.89	3.95	3.93	3.93	4.03	3.91

					Undefended											
Map Reference	Model Node Reference	Easting	Northing	Data	50 % AEP (1 in 2 year)	20 % AEP (1 in 5 year)	10 % AEP (1 in 10 year)	5 % AEP (1 in 20 year)	4 % AEP (1 in 25 year)	2 % AEP (1 in 50 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	1 % AEP (1 in 100 year) + 30% increase in flow	1 % AEP (1 in 100 year) + 35% increase in flow	1 % AEP (1 in 100 year) + 70% increase in flow	0.5 % AEP (1 in 200 year)
5	2D Levels	387413	393554	Modelled Water Level (m aodN)						51.49	51.52	51.53	51.68	51.69	51.72	51.64
6		387448	393488	Modelled Water Level (m aodN)	50.82	50.83	51.05	51.26	51.34	51.53	51.55	51.56	51.70	51.71	51.76	51.67



Legend

- Site Location
- Model Measurements
- 2D Levels
- Main River
- Flood Zone 3
- Flood Zone 2

1 % AEP (1 in 100 year) + 35% increase in flow
51.68
51.71

Example Product 4 data – finding the estimated flood level:

Above is an example Product 4 data table.

We will now identify the cell which contains our estimated flood level, needed for our flood risk assessment:

Use the closest **2D Level Map Reference** for your proposed development (as determined from the accompanying map). In this example, our closest Map Reference is **6.**

Our Climate Change Allowance, determined from Step 2 of the form, is **35%.**

We go to the row for **Map Reference 6**, to obtain the data for **"Modelled Water Level (m aodN)".**

We use the 'Undefended' section of the table if we get a choice between 'Defended' and 'Undefended'.

We go across this row to the column for **1% AEP + 35%.**

We have found our estimated flood level**: 51.71**

What if the Product 4 does not include data for the exact Climate Change allowance determined from Step 2?

If the Product 4 data does not include the exact Climate Change allowance, use the closest % available.

For example, if your Climate Change allowance is + 41% but the Product 4 options are + 35% or + 70%, you should use + 35% as the closest value.