



**THE HIGHLAND COUNCIL
BUILDING STANDARDS**

POLICY NOTE BST – 020

Biomass Installations

Key Contact

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1. Introduction

There has been an increase in biomass installations over recent years ranging from small domestic systems to community systems serving a number of properties and large scale Installations serving Non-Domestic Buildings.

There has been confusion whether certain installations are exempt under Schedule 1, Regulation 3; do not require a Building Warrant under Schedule 3, Regulation 5 or indeed do require BW approval.

The BSD published a document 'Low Carbon Equipment & Building Regulations: Biomass Installations' in February 2012 and although don't answer the above questions directly provide very useful information when dealing with these types of application (eg HETAS recommends that a Carbon Monoxide Detector is installed with every solid fuel appliance including existing ones). It should be noted the scope of the guidance in the document is for small domestic sized installations with boilers that have an output less than 50kW.

2. Policy Decision

A biomass installation will always include a boiler or stove which should be treated as a combustion appliance. Irrespective of the output rating or the location of the appliance, a biomass installation should not be deemed fixed plant or machinery and therefore not exempt under Schedule 1, Regulation 3.

To determine whether the biomass installation will require a building warrant or not, refer to the attached documents produced by the BSD 'Guidance on Combustion Appliances and associated work not requiring a warrant. (Domestic Buildings – Appendix A and Non-Domestic Buildings – Appendix B). These documents relate to Schedule 3, Regulation 5 and are laid out in a matrix for simplicity.

Following a discussion with the author of the documents the following examples are included to help interpret the matrix.

- If the biomass boiler is to be installed within an existing house then this will fall into Type 1 of Schedule 3. If we assume a two storey house and the works do not affect any structural elements as listed in Note 2 then a BW would NOT be required irrespective of the kW output of the boiler.
- If the biomass boiler is to be installed in a garage, detached building or attached outhouse (no direct access to house) then Type

1 would not apply as the work is not to or in a house. In this case the work would fall into Type 6. Assuming a new flue pipe, chimney and/or constructional hearth (Note 4) will also be installed then a BW WOULD be required.

- The Installation of a biomass boiler with an output more than 50kW in a flat or 3 storey house WOULD require a BW.

The same principal should be adopted for Non-Domestic buildings. If the biomass boiler is to be installed within an existing building then Type 2 would apply. If a detached Biomass Unit is proposed then a BW WILL be required assuming a flue pipe, chimney or constructional hearth is also installed as per Note 4.

Tony Miller 16/05/13

APPENDIX A



Building (Scotland) Regulations 2004 Regulation 5, Schedule 3

Guidance on Combustion appliances and associated work not requiring a warrant ^[1]



DOMESTIC BUILDINGS	WORK TO EXISTING BUILDINGS ^[2]			
Work Activity	Type ^[3]	Flat	House (up to 2 storeys)	House (3 storeys & above)
NEW AND REPLACEMENT BOILERS				
New gas combustion appliance, not more than 70kW net input ^[4]	1, 6	Not Required	Not Required	Not Required
New gas combustion appliance, more than 70kW net input ^[4]	1, 6	Required	Not Required	Required
New oil combustion appliance, not more than 45kW output ^[4]	1, 6	Not Required	Not Required	Not Required
New oil combustion appliance, more than 45kW output ^[4]	1, 6	Required	Not Required	Required
New Solid fuel combustion appliance, not more than 50kW output ^[4]	1, 6	Not Required	Not Required	Not Required
New Solid fuel combustion appliance, more than 50kW output ^[4]	1, 6	Required	Not Required	Required
Replacement gas appliance, not more than 70kW net input	1, 6	Not Required ^[5]	Not Required ^[5]	Not Required ^[5]
Replacement oil appliance, not more than 45kW output	1, 6	Not Required ^[5]	Not Required ^[5]	Not Required ^[5]
Replacement solid fuel appliance	1, 24	Not Required ^[6]	Not Required ^[6]	Not Required ^[6]
Electrical work associated with boiler installation or replacement		See separate electrical matrix		
CHIMNEYS/FLUE-PIPES				
Installation of a new or replacement balanced flue serving a room sealed appliance	1, 7	Not Required	Not Required	Not Required
Installation of a new chimney or flue-pipe	1	Required	Not Required	Required
Installation of a flue liner	1, 9	Not Required	Not Required	Not Required
Alterations to an existing chimney or flue-pipe	1	Required	Not Required	Required
Repairs to, or replacement of, an existing chimney, flue-pipe or a flue outlet or terminal	1, 24	Not Required ^[6]	Not Required ^[6]	Not Required ^[6]
HEARTHES				
New or replacement superimposed hearth (i.e. non-constructural)	1, 6, 24	Not Required ^[6, 7]	Not Required ^[6]	Not Required ^[6, 7]
New constructional hearth not affecting the floor or wall structure	1, 6	Required	Not Required	Required

Work Activity	Type ^[3]	Flat	House (up to 2 storeys)	House (3 storeys & above)
FUEL STORAGE (when connected to a combustion appliance for space/water heating or cooking) ^[8]				
Installation of an LPG storage tank, including pipework connecting the tank to a combustion appliance with a net input rating of 70kW or less	1, 6	Not Required	Not Required	Not Required
Work associated with refillable LPG cylinders serving space/water heating combustion appliance(s) or cooking facilities via fixed pipework	1, 10	Not Required	Not Required	Not Required
Installation of a fixed oil storage tank with a capacity of more than 90 litres, including pipework connecting the tank to the combustion appliance	1, 6	Required	Not Required	Required
Repairs to, or replacement of, an LPG or oil storage tank, including associated pipework	1, 24	Not Required ^[6]	Not Required ^[6]	Not Required ^[6]
Installation of an oil storage tank with a capacity of not more than 90 litres		The building regulations do not cover work of this nature		
CENTRAL HEATING AND HOT WATER STORAGE ANCILLARIES				
Any work associated with a combustion appliance installation, e.g. pipework, radiators, convector heaters and thermostatic controls	1, 8	Not Required	Not Required	Not Required

Note 1 Works not requiring a building warrant under the terms of schedule 3 require, in all respects, to meet the requirements of the relevant regulations, except where falling within types 24 to 26, where works constituting replacements must be to a standard no worse than at present.

Note 2 Where indicated as not requiring warrant approval, this is on the proviso that no structural works to, or affecting, the roof, external walls or elements of structure, or works adversely affecting a separating wall/floor, are to be carried out to facilitate the installation. This guidance is intended to cover the indicated work activities only, a building warrant may be required for ancillary works. If the work activity is carried out at the same time as works requiring a warrant, the building warrant application should include all works.

Note 3 Building work type as referenced in schedule 3.

Note 4 Excluding works to a flue-pipe, chimney and/or constructional hearth.

Note 5 On condition that the boiler complies with the current technical standards

Note 6 If a replacement, on condition that the installation is to a standard no worse than at present.

Note 7 Not applicable to solid fuel appliances having an output rating more than 50kW, oil-firing appliances with an output rating more than 45kW or gas-fired appliances having a net input rating of more than 70kW.

Note 8 The installation of biomass storage should be discussed with the local authority verifier.

APPENDIX B



Building (Scotland) Regulations 2004 Regulation 5, Schedule 3

Guidance on Combustion appliances and associated work not requiring a warrant ^[1]



NON-DOMESTIC BUILDINGS	WORK TO EXISTING BUILDINGS ^[2]			
Work Activity	Non-residential buildings with a storey, or creating a storey, not more than 7.5m high			Other non-domestic buildings
	Type ^[3]	No public access ^[9]	Public access ^[9]	
NEW AND REPLACEMENT BOILERS				
New gas combustion appliance, not more than 70kW net input ^[4]	2, 6	Not Required	Not Required	Not Required
New gas combustion appliance more than 70kW net input ^[4]	2, 6	Not Required	Required	Required
New oil combustion appliance, not more than 45kW output ^[4]	2, 6	Not Required	Not Required	Not Required
New oil combustion appliance more than 45kW output ^[4]	2, 6	Not Required	Required	Required
New Solid fuel combustion appliance, not more than 50kW ^[4]	2, 6	Not Required	Not Required	Not Required
New Solid fuel combustion appliance more than 50kW output ^[4]	2, 6	Not Required	Required	Required
Replacement gas appliance, not more than 70kW net input	2, 6	Not Required ^[5]	Not Required ^[5]	Not Required ^[5]
Replacement oil appliance, not more than 45kW output	2, 6	Not Required ^[5]	Not Required ^[5]	Not Required ^[5]
Replacement solid fuel appliance	2, 24	Not Required ^[6]	Not Required ^[6]	Not Required ^[6]
Electrical work associated with boiler installation		See separate electrical matrix		
CHIMNEYS/FLUE-PIPES				
Installation of a new or replacement balanced flue serving a room sealed appliance	2, 7	Not Required	Not Required	Not Required
Installation of a new chimney or flue-pipe	2	Not Required	Required	Required
Installation of a flue liner	2, 9	Not Required	Not Required	Not Required
Alterations to an existing chimney or flue-pipe	2	Not Required	Required	Required
Repairs to, or replacement of, an existing chimney, flue-pipe or a flue outlet or terminal	2, 24	Not Required ^[6]	Not Required ^[6]	Not Required ^[6]
HEARTHES				
New or replacement superimposed hearth (i.e. non-constructural)	2, 6, 24	Not Required ^[6]	Not Required ^[6, 7]	Not Required ^[6, 7]
New constructional hearth not affecting the floor or wall structure	2, 6	Not Required	Required	Required

Work Activity	Non-residential buildings with a storey, or creating a storey, not more than 7.5m high			Other non-domestic buildings
	Type ^[3]	No public access ^[9]	Public access ^[9]	
FUEL STORAGE (when connected to a combustion appliance installation for space/water heating) ^[8]				
Installation of an LPG storage tank, including pipework connecting the tank to a combustion appliance with a net input rating of 70kW or less	2, 6	Not Required	Not Required	Not Required
Work associated with refillable LPG cylinders serving space/water heating combustion appliance(s) or cooking facilities via fixed pipework	2, 10	Not Required	Not Required	Not Required
Installation of a fixed oil storage tank with a capacity of more than 90 litres, including pipework connecting the tank to the combustion appliance	2, 6	Not Required	Required	Required
Repairs to or replacement of an LPG or oil storage tank, including associated pipework	1, 24	Not Required ^[6]	Not Required ^[6]	Not Required ^[6]
Installation of an oil storage tank with a capacity of not more than 90 litres		The building regulations do not cover work of this nature		
CENTRAL HEATING AND HOT WATER STORAGE ANCILLARIES				
Any work associated with a combustion appliance installation, e.g. pipework, radiators, convector heaters and thermostatic controls	2, 8	Not Required	Not Required	Not Required

Note 1 Works not requiring a building warrant under the terms of schedule 3 require, in all respects, to meet the requirements of the relevant regulations, except where falling within types 24 to 26, where works constituting replacements must be to a standard no worse than at present.

Note 2 Where indicated as not requiring warrant approval, this is on the proviso that no structural works to, or affecting, the roof, external walls or elements of structure, or works adversely affecting a separating wall/floor, are to be carried out to facilitate the installation. **This guidance is intended to cover the indicated work activities only, a building warrant may be required for ancillary works. If the work activity is carried out at the same time as work requiring a warrant, the building warrant application should include all works.**

Note 3 Building work type as referenced in schedule 3.

Note 4 Excluding works to a flue-pipe, chimney and/or constructional hearth.

Note 5 On condition that the boiler complies with the current technical standards

Note 6 If a replacement, on condition that the installation is to a standard no worse than at present.

Note 7 Not applicable to solid fuel appliances having an output rating more than 50kW, oil-firing appliances with an output rating of more than 45kW or gas-fired appliances having a net input rating of more than 70kW.

Note 8 The installation of biomass storage should be discussed with the local authority verifier.

Note 9 Non-residential buildings to which the public does not have access may include: offices, storage buildings, industrial buildings, e.g. factories and workshops, assembly and entertainment buildings not open to the public, e.g. some educational buildings and private members clubs. Non-residential buildings to which the public has access may include: assembly and entertainment buildings open to the public, e.g. community schools, pubs and clubs.