

VERIFICATION DURING CONSTRUCTION NON-DOMESTIC BUILDINGS

Guidance to Support the Application of Reasonable Inquiry



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1.0	01/10/13	First Edition
1.1	01/10/19	Inclusion of additional guidance on larger projects and amendments to annexes to include reference to safety critical elements.

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1. Introduction

Purpose

This handbook has been produced to support the Performance Framework implemented from 1 October 2012, in particular, **Key Performance Outcome 2** 'Increased Quality of Compliance during the Construction Processes' specifically related to non-domestic buildings. It has been developed by Local Authority Building Standards Scotland (LABSS) and the approach is supported by the Building Standards Division of the Scottish Government.

As with the guidance for domestic buildings, the aim of this handbook is to promote a consistent level of building standards service during verification of construction by using a risk-based approach to inspection and other forms of assessment e.g. photographs.

The key objectives of this document are to enable local authority verifiers to maximise their effectiveness in deploying their resources for the monitoring of building work. This points clearly to the importance of a risk assessed approach and that resources should be applied where the greatest risk of non-compliance may exist.

This guidance does not seek to define 'reasonable inquiry' in terms of the Building (Scotland) Act 2003. However, it will aid the application of reasonable inquiry as it relates to each individual building warrant.

The Building Standards System in Scotland

The building standards system in Scotland is established by the Building (Scotland) Act 2003. The system is intended to ensure that building work on both new and existing buildings results in buildings that meet reasonable standards. The standards are set out in the building regulations which are, in the terms of the Act, intended to:

- secure the health, safety, welfare and convenience of persons in or about buildings and of others who may be affected by buildings or matters connected with buildings
- · further the conservation of fuel and power, and
- further the achievement of sustainable development.

The purpose of the building standards system is to protect the public interest. To ensure that the aim of the system is not undermined, the Building (Scotland) Act 2003 provides local authorities, through the verification process, the power where necessary, to take action to make buildings comply with the building regulations.

Verification of the compliance of building works with Scottish building regulations is undertaken by the 32 Scottish local authorities in their role as verifiers. The work of verifiers has two main elements: checking that building plans comply with building regulations when an application is made for a building warrant and undertaking reasonable inquiries to verify that the building work complies with the approved plans, details and with regulations.

The inspection of building work in progress is an important part of the building standards verification procedure. However, it must be stressed that inspections are to protect the public interest in terms of compliance with building regulations, not to ensure that all the work is constructed as the person paying for the work would want it.

1. Introduction

Responsibility for compliance with the building regulations lies with the relevant person (usually the owner or developer). Therefore any checks made by a verifier do not remove any responsibility from the relevant person who is required to certify all the completed work as being in accordance with the approved plans, details and building regulations by the submission of a Completion Certificate to the verifier.

In signing the Completion Certificate the relevant person is declaring that any work has been carried out in accordance with the approved building warrant plans and in addition also confirms work complies with building regulations.

Building standards surveyors cannot and are not required to supervise or monitor every activity on a building project nor can they be present at all times. The supervision of building work is the responsibility of the building owner or developer who should appoint a building professional to supervise the work to ensure the standard of workmanship is satisfactory and meets the building regulations.

The lack of adequate supervision during building work can result in the final product not performing as designed which could lead to delays in the acceptance of a Completion Certificate by the verifier.

2. Methodology

Overview

The methodology is organised around four consecutive elements of the warrant application process. It also identifies a risk assessment procedure for carrying out verification.

This approach is risk based, flexible, easily understood and communicated.

In simple terms, the verifier actions are:

Building		Identify		Identify		Undertake
warrant	\rightarrow	project risk	\rightarrow	inspection	\rightarrow	site visits or
application				stages		other actions

See Section 7 for the Outline Process Flow Chart

Risk Assessment

There are many factors which will influence a verifier's approach to reasonable inquiry for a nondomestic building. This therefore requires a methodology that is flexible while at the same time simple to use and can be applied with a level of consistency by all verifiers. The aim being that similar building projects will receive a similar number of checks on a similar range of construction elements.

This guidance provides information for verifiers on aspects that increase 'risk' which can be described as the likelihood of non-compliance with building regulations. Such aspects have the potential to harm current and future users of the building and the environment.

This methodology for non-domestic buildings builds on the general risk-based principles set out in the domestic guidance handbook. This handbook focuses on new non-domestic buildings however the principles are equally relevant to alterations and extensions. The principles in the domestic handbook may also be relevant in certain instances.

Annex B provides guidance on a range of building types, listing factors which affect risk and which in turn will influence the Construction Compliance and Notification Plan (CCNP) for that individual project.

The case surveyor/officer needs to take responsibility for the creation of the CCNP while considering the number of risk factors present in any particular building. During the assessment process they will identify the number of risk factors present in any particular building. The more risk factors that are identified, the more specific checks that are required. In addition, the success of the CCNP relies on notification by the applicant or relevant person at the prescribed stages in the construction process.

The methodology considers five groupings for non-domestic buildings:

Grouping	Types of buildings covered
Residential	 Small premises containing sleeping accommodation such as a bed and breakfast, boarding house, guest house or small hotel or hostel
	 Medium and large premises containing sleeping accommodation (greater than 200m² in floor area and three storeys and above) such as motels/hotels
	 Hospitals, nursing homes, hospices, children's homes
Assembly	Churches and crematoria
	 Schools, libraries and health centres
	 Auditoriums and sports stadium
Commercial	Cafes and small shops
	 Supermarket, pubs, restaurants and nightclubs
	 Large office buildings and shopping centres
Industrial	Small factory units
	Building used for manufacturing
	Refinery building
Storage/agricultural	Grain/food store, large cattle shed
	Car parking
	Bonded warehouse

Annex C includes a CCNP example for a 'typical' small, medium sized and large project; these examples are a guide and not templates. Each project will have an individual CCNP created from the unique risks within that building.

This guidance also includes typical values which verifiers may wish to use within their back office systems to populate the CCNP.

To further assist in the application of the methodology, Annex E provides a simplistic overview of the key aspects of compliance checks in relation to the technical handbooks.

The guidance in this document will assist the verifier in creating a CCNP, which will then be issued along with the building warrant. This plan will confirm the different stages of construction of the project where the owner or developer must notify the verifier.

The plan will also detail any alternative to site visits deemed appropriate by the verifier.

The content of the CCNP will be developed during the processing of the building warrant application.

When an application is received it will be allocated to an appropriate building standards surveyor or officer in accordance with the verifier's protocol for allocation. This will be based on the

particulars of the application whilst taking into consideration factors which may increase the risk level of the application.

The quality of the application and any resubmissions should also be considered as this could indicate a higher risk of non-compliance during the construction phase. The complexity aspects will be unique to each project. From this risk review the verifier will draw up a schedule of site visits or other alternative methods of gathering evidence to check compliance.

This gathering of evidence on critical parts of the construction will dictate the key stages of construction when the verifier will require to be notified and this will be reflected in the CCNP.

3. Construction Compliance and Notification Plan

Construction Compliance and Notification Plan (CCNP)

The CCNP is issued at the same time as the building warrant. It sets out the key construction stages that the verifier has identified for site visits or other alternative methods to check compliance. It clarifies when the applicant or developer should notify the verifier and the purpose of those notifications. Notifications should allow sufficient time for the verifier to respond as appropriate.

When the applicant uses an agent, any notes for guidance should make it clear that the CCNP should be sent by the agent to the applicant and/or developer for passing to the builder. This is important to make sure the CCNP notifications are made to the verifier.



Construction Stages

The timing of the construction stages should also be considered, for example:

- <u>Early</u> (at or shortly after commencement) foundations, open drains, and other site works are available for inspection
- Intermediate (at the most appropriate stages) the superstructure would be part complete, but would still allow issues such as fire protection, structural elements and insulation to be viewed. The intermediate stage of a project may last weeks or months and may include multiple site visits by a verifier.
- <u>Late</u> (shortly before or at completion) near to completion inspection would consider a range of issues on fire safety, services, safety, accessibility and the buildings overall readiness for occupation.

In reflecting the need for a verifier to appropriately deploy their resources, multiple elements identified in a particular stage of a CCNP may be seen during a single visit - the extent of which is the judgement of the individual building standards surveyor or officer.

For larger projects it is recognised that the early, intermediate and late stages of construction may last several months. It is therefore necessary for the verifier to programme inspections to reflect the need for multiple checks at appropriate points within each construction stage, based on the rate of construction on site.

In these situations the verifier should not solely rely on notification to trigger such checks. However, it is still essential for the relevant person to maintain communication with the verifier in line with the content of the CCNP. For example, notification to the verifier related to an intermediate stage should take cognisance of all aspects listed for that stage.

For elements of construction which may be at risk of disturbance after inspection, such as fire stopping, it is expected that the verifier would undertake an element of rechecking at the completion stage.

Construction Risk

The owner, developer, builder, sub-contractors and site agents are key factors in the successful transfer of the approved design into a completed project compliant with building regulations. Once work has started however, if the verifier considers it necessary to intervene more, they should introduce additional checking for compliance. In exceptional cases the verifier may consider issuing an updated CCNP to ensure they are notified at the additional stages.

Interaction with Performance Framework

Local authority verifiers, in partnership with Scottish Government, have developed a Performance Framework. This framework will assist the drive to promote quality of assessment and effective adherence to the building regulations compliance process. A number of Key Performance Outcomes have been adopted within the framework. In particular **Key Performance Outcome 2** covers 'Compliance during the Construction Processes' and aims to encourage better compliance of the built product. The measures being implemented for non-domestic buildings are:

- The % of Construction Compliance and Notification Plans (CCNPs) fully achieved
- · Main aspects of construction non-compliance identified
- Main factors preventing the delivery of the CCNPs (e.g. applicant/verifier/both)

In accordance with the requirements of the agreed Performance Framework, Construction Compliance and Notification Plans created in accordance with this guidance will be issued with all non-domestic building warrants granted for applications made on or after 1 October 2013.

4. Sampling

Multiple buildings

Some projects may consist of multiple buildings of the same or similar designs with a single client, for example retail parks or industrial estates. These will have common constructions above ground with variations in below ground constructions such as foundations or drainage due to site conditions and layout. They will generally have the same main contractor, although sub-contractors could vary, particularly on a large or phased contract. The approach for reasonable inquiry should be project-based with reference to the type and mix of buildings and the phasing of commencements across the site. A single CCNP can be created covering all buildings and sampling may have a role as set out in the domestic handbook for multi-plot housing.

Large buildings

Buildings within any of the uses within the groupings in Section 2 can vary significantly in proportion. The baseline aspects of construction identified for inspection for a specific use will generally be the same for small, medium and large buildings. The main difference between them being that as buildings get larger, there will be more of the particular construction aspects repeated including drainage, foundations, fire compartmentation or separation, staircases, insulated envelope and similar. In these cases sampling may have a role. For example, consider a small two storey office building with single stairway and separate occupiers on ground and first floors. Enlarge the building to five storeys with multiple stairways and the approach can be clearly seen.

Sampling

The practice of sampling is a key part of the application of reasonable inquiry for non domestic buildings. In considering the best use of resources, repeating aspects of any construction should in themselves be subject to risk assessment with not every single aspect required to be checked by the verifier. This would apply to construction elements such as insulation, structural fire protection, cavity barriers, fire stopping around openings and junctions, fire collars, fire dampers and other service penetrations. It may also apply to the testing of large drainage installations.

An approach to sampling must be reactive to checks undertaken by the verifier as construction progresses. Where areas of non-compliance are found the level of sampling may need to be increased and in some cases all elements may require to be checked.

Sampling should be adopted in partnership with other alternative evidence options such as certification of construction, photographs or test reports.

The details of a verifier's approach to sampling must be recorded in the building warrant file; this will include reference to any discussion or agreement with those on site.

5. Application of Methodology



This section looks at practical information which will assist a verifier in applying the methodology on a day to day basis.

Who should receive the CCNP?

The CCNP will be produced at the same time as the building warrant package and will be sent to the agent or, if no agent, direct to the applicant. When the applicant uses an agent, any notes for guidance should make it clear that the CCNP should be sent by the agent to the applicant or developer. If an agent is not employed any notes for guidance should make it clear that the applicant is responsible for passing the CCNP to the builder or person responsible for overseeing the building work.

Alternative Evidence

The CCNP allows the verifier to detail any alternatives to site visits. This may include photographs, inspection, test reports or certificates of construction issued by an Approved Certifier of Construction. The verifier should decide which forms of alternative evidence are appropriate for each application.

To reduce the potential for delays later in the process the acceptance of alternative evidence should be agreed prior to works starting on site and will be detailed in the CCNP. A verifier may however use their discretion and accept alternative evidence at any time during the reasonable inquiry process.

Late Building Warrant

For this type of application a CCNP should be created in the same way as a normal warrant application. However, a verifier note should be appended to the plan indicating that where any prescribed stages have already been completed then a disruptive inspection may be required.

Staged Warrant

For this type of application a CCNP will be created and issued on approval of the first stage. Depending on the nature of the application it may be that the CCNP will be limited to covering this stage only. However, a verifier may issue a full CCNP at this stage if sufficient knowledge is available. In any case, the CCNP may require to be reviewed when amendments for subsequent stages are approved.

Amendment to Warrant

Depending upon the nature of the amendment, the CCNP issued with the original warrant application may require to be reviewed.

Completion Certificate where no Warrant was obtained

A CCNP is not required for this type of application, however reasonable inquiry should be applied when considering the acceptance of the completion certificate. Relevant construction non-compliance issues should still be reported in accordance with **Key Performance Outcome 2**.

6. Reporting of Key Performance Outcomes

Key Performance Outcome reporting (KPO 2)

KPO reporting commenced from 1 October 2012 for all building types. At that time, the risk based methodology for domestic buildings was introduced, with the methodology for non-domestic buildings being introduced from 1 October 2013. Up until then, local authorities based their CCNPs for non-domestic buildings on their current practices. Details of the performance framework and reporting template for quarterly submission to the Scottish Government are available at http://www.scotland.gov.uk/Topics/Built-Environment/Building/Building-standards/verification/2011-17.

Although the methodology is introduced from 1 October 2013, the single NDOM reporting category will continue until the end of 2013-14 reporting year. From 1 April 2014, the category will be subdivided into the five building use groupings as detailed in Section 2 and Annex B.

Number of CCNPs for 'accepted' completion certificates

This section is self-explanatory. Note this measure is related to applications submitted on or after 1 October 2012 and it is expected that this return will be 100%. The methodology in this guidance should be used for applications submitted on or after 1 October 2013.

The number of CCNPs fully achieved

This measure relates to whether the verifier undertook a site visit or other agreed compliance checking, at all the stages prescribed in the CCNP. This relies on sufficient notification by the applicant, developer or builder at the key stages highlighted in the CCNP. The reporting spreadsheet will automatically establish the % of CCNPs fully achieved based on the numbers input.

The main reasons why CCNPs were not fully achieved

This measure is based on data recorded by the verifier. A CCNP will not be fully achieved through either one or both of:

- a lack of notification or non-submission of alternative evidence by the relevant person, or
- non-inspection by the verifier.

A verifier should be able to record and report why the CCNP was not met.

The main aspects of technical non-compliance found through Reasonable Inquiry (prioritised)

The aim of this measure is to record aspects of construction non-compliance and to report issues with a national impact. This is to help drive forward improvements in the verification system. This measure is based on the information available to the verifier. The verifier should exercise judgement as to what to report. In order to ensure consistency in reporting it is recommended that for each building project, the verifier records any 'major aspects of technical non-compliance'

6. Reporting of Key Performance Outcomes

categorised by the section of the Technical Standards. A major aspect of non-compliance is one which could lead to a significant failure of any aspect of the building.

7. Outline Process Flow Chart



Risk Factors

This section details a range of factors which should be considered by the verifier when creating the CCNP, these factors along with the more specific risks detailed for each building type will influence the final content of the CCNP.

Value of work

The value of work can be considered as an initial indicator of the size or complexity of a project. Accepting that the warrant fee should cover the costs to undertake verification can also reflect the resources the verifier should divert to the project. However this relationship is not always directly proportional, for example relatively straightforward projects of high value such as commercial fit-outs. Also for projects of similar value, the building size, in particular the building height may be important. Nonetheless for some types of project, the value of the work will often reflect the complexity.

Quality of application

The submission of good quality plans is essential in all applications; poor quality drawings with many resubmissions being necessary during the building warrant application process prior to final approval may provide an indication of the role and competency of the applicant and their designer(s) which could be reflected in the construction phase.

Contractor competence/Level of site supervision

This is important as it determines the translating of the design into a completed compliant building. However it is difficult to assess or quantify as it is due to many other factors such as previous experience on the type of project, use of subcontractors and possibly profit margins. Past experience is not always a guarantee. As this cannot be assessed at design stage it should be left out of the risk analysis involved in creating the CCNP. This criterion however is fundamental to compliance and needs to be assessed throughout construction phase.

Annex B - Non-domestic grouping risk factors

B.1 NDOM 5 - Residential

Future reporting work type code NDOM 5.

- Small premises containing sleeping accommodation such as a bed and breakfast, boarding house, guest house or small hotel or hostel
- Medium and large premises containing sleeping accommodation (greater than 200m² in floor area and three storeys and above) such as motels/hotels
- Hospitals, nursing homes, hospices, children's homes.

Factors which may increa	se baseline risk of non-compliance with building standards		
Structure	Structure risk rating (1, 2A, 2B or 3) Unusual ground conditions		
Fire	Occupant numbers Occupant profile (sleeping/unfamiliar/limited mobility/vulnerable etc.) Storey height or depth Floor plan (cellular/complex) Compartmentation/sub compartmentation and/or separation (walls/ floors) Atria/voids Inner rooms Escape across flat roof/access deck Places of special fire risk Use of novel or innovative materials or construction techniques Use of alternative solutions involving fire safety systems Relationship to boundary		
Environment	Site preparation – harmful and dangerous substances including radon Flood risk Non mains drainage system Combustion appliance/fuel storage		
Safety	Unvented HW system safety devices; vulnerable doors and windows		
Noise	Use of novel or innovative materials or construction techniques		
Energy	Use of novel or innovative materials or construction techniques Use of renewable technologies		
Sustainability	Higher levels of sustainability		
Others	Use of alternative solutions to other standards Involves known areas of potential non-compliance		
Factors which may reduce risk of non-compliance with building standards			
Competence of stakeholders involved in the design and build process			
High level of on site supervi	ision		

B.2 NDOM 6 - Assembly

Future reporting work type code NDOM 6.

- Churches and crematoria
- Schools, libraries and health centres
- Auditoriums and sports stadium.

Factors which may <u>increase baseline risk of non-compliance with building standards</u>				
Structure	Structure risk rating (1, 2A, 2B or 3) Unusual ground conditions			
Fire	Occupant numbers Occupant profile (sleeping/unfamiliar/limited mobility/vulnerable/level of intoxication if premises are to be licensed etc.) Storey height or depth Floor plan (cellular/complex) Compartmentation/sub compartmentation and/or separation (walls/ floors) Atria/voids Inner rooms Escape across flat roof/access deck Places of special fire risk Use of novel or innovative materials or construction techniques Use of alternative solutions involving fire safety systems Relationship to boundary Escalators Fixed seating Fire shutters			
Environment	Site preparation – harmful and dangerous substances including radon Flood risk Non mains drainage system Combustion appliance/fuel storage			
Safety	Unvented HW system safety devices; vulnerable doors and windows			
Noise	Use of novel or innovative materials or construction techniques			
Energy	Use of novel or innovative materials or construction techniques Use of renewable technologies			
Sustainability	Higher levels of sustainability			
Others	Use of alternative solutions to other standards Involves known areas of potential non-compliance			
Factors which may reduce	Factors which may <u>reduce</u> risk of non-compliance with building standards			
Competence of stakeholder	s involved in the design and build process			
High level of on site supervi	sion			

B.3 NDOM 7 - Commercial

Future reporting work type code NDOM 7.

- Cafes and small shops
- Supermarkets, pubs, restaurants and nightclubs
- Large office buildings and shopping centres.

Factors which may <u>increase baseline risk of non-compliance with building standards</u>			
Structure	Structure risk rating (1, 2A, 2B or 3) Unusual ground conditions		
Fire	Occupant numbers Occupant profile (sleeping/unfamiliar/limited mobility/vulnerable/ level of intoxication if premises are to be licensed etc.) Storey height or depth Floor plan (cellular/complex) Compartmentation/sub compartmentation and/or separation (walls/ floors) Atria/voids Inner rooms Escape across flat roof/access deck Places of special fire risk Use of novel or innovative materials or construction techniques Use of alternative solutions involving fire safety systems Relationship to boundary Escalators Fixed seating Fire shutters SHEVS		
Environment	Site preparation – harmful and dangerous substances including radon Flood risk Non mains drainage system Combustion appliance/fuel storage		
Safety	Unvented HW system safety devices; vulnerable doors and windows		
Noise	Use of novel or innovative materials or construction techniques		
Energy	Use of novel or innovative materials or construction techniques Use of renewable technologies Display windows		
Sustainability	Higher levels of sustainability		
Others	Use of alternative solutions to other standards Involves known areas of potential non-compliance		
Factors which may red	luce risk of non-compliance with building standards		
Competence of stakehol	ders involved in the design and build process		
High level of on site sup	ervision		

B.4 NDOM 8 - Industrial

Future reporting work type code NDOM 8.

- Small factory unit
- Building used for manufacturing
- Refinery building.

Factors which may <u>increase baseline risk of non-compliance with building standards</u>				
Structure	Structure risk rating (1, 2A, 2B or 3) Unusual ground conditions			
Fire	Occupant numbers Process undertaken (involving hazardous materials or manufacturing methods) Storey height or depth Floor plan (cellular/complex) Compartmentation/sub compartmentation and/or separation (walls/floors) Voids Inner rooms Places of special fire risk Use of novel or innovative materials or construction techniques Use of alternative solutions involving fire safety systems Relationship to boundary Fire shutters			
Environment	Site preparation – harmful and dangerous substances including radon Flood risk Non mains drainage system Combustion appliance/fuel storage			
Safety	Unvented HW system safety devices; vulnerable doors and windows			
Noise	Use of novel or innovative materials or construction techniques			
Energy	Use of novel or innovative materials or construction techniques Use of renewable technologies Display windows			
Sustainability	Higher levels of sustainability			
Others	Use of alternative solutions to other standards Involves known areas of potential non-compliance			
Factors which may reduce ris	k of non-compliance with building standards			
Competence of stakeholders involved in the design and build process				
High level of on site supervision				

B.5 NDOM 9 - Storage/Agricultural

Future reporting work type code NDOM 9.

- Grain/food store, large cattle shed
- Car parking
- Bonded warehouse.

Factors which may increase	baseline risk of non-compliance with building standards
Structure	Structure risk rating (1, 2A, 2B or 3) Unusual ground conditions
Fire	 Occupant numbers Materials or products stored (low or high risk) Storey height or depth Floor plan (cellular/complex) Compartmentation/sub compartmentation and/or separation (walls/floors) Places of special fire risk Use of novel or innovative materials or construction techniques Use of alternative solutions involving fire safety systems Relationship to boundary Fire shutters
Environment	Site preparation – harmful and dangerous substances including radon Flood risk Non mains drainage system Combustion appliance/fuel storage
Safety	Protection around pits/drops etc.
Noise	Use of novel or innovative materials or construction techniques
Energy	Use of novel or innovative materials or construction techniques Use of renewable technologies Display windows
Sustainability	Higher levels of sustainability
Others	Use of alternative solutions to other standards Involves known areas of potential non-compliance
Factors which may reduce r	isk of non-compliance with building standards
Competence of stakeholders i	nvolved in the design and build process
High level of on site supervision	on

Annex C - Example CCNPs (small, medium/large buildings)

Example 1 - Typical Small Building

Key Construction	Status	Notes for Applicant	Appropriate alternative evidence	Fulfilled
Stages (Site visit)			(non-site visit)	(Tes/NO)
Commencement	Μ	Send commencement to verifier at least seven days prior to starting on site. Please confirm proposed level of supervision, if any, during construction and the name of the builder undertaking the work		Yes/No
Foundation	N	Excavation prior to concrete being poured	Statement from Chartered Structural Engineer who designed the building or Engineer acting on behalf of design engineer	Yes/No
Superstructure - shell	N	Structural elements (including wall ties/lateral restraint)		Yes/No
Superstructure - fit out	Ν	Insulation and other standards		Yes/No
Completion	M	Submit Completion Certificate and any relevant paperwork. No occupation of building before completion accepted (see notes)		Yes/No

Example 2 - Typical Medium Sized Building

Key Construction Stages (Site visit)	Status	Notes for Applicant	Appropriate alternative evidence (non-site visit)	Fulfilled (Yes/No)
Commencement	M	Send commencement to verifier at least seven days prior to starting on site. Please confirm proposed level of supervision, if any, during construction and the name of the builder undertaking the work		Yes/No
Foundation	N	Excavation prior to concrete being poured		Yes/No
Substructure/ drainage	N	Drain test for full system		Yes/No
Superstructure	N	Structural frame and insulation before plaster board fitted (including wall ties/lateral restraint)		Yes/No
Superstructure	N	Compartment walls/ceilings at roof level to ensure complete separation provided		Yes/No
Superstructure	Ν	Fire collars/fire shutters/ service penetrations through walls/floors/SHEVS		Yes/No
Completion	M	Submit Completion Certificate and any relevant paperwork. No occupation of building before completion accepted (see notes)		Yes/No

Example 3 - Typical Large Building

Key Construction Stages (Site visit)	Status	Notes for Applicant	Appropriate alternative evidence	Fulfilled (Yes/No)
(2007)			(non-site visit)	
Commencement	Μ	Send commencement to verifier at least seven days prior to starting on site. Please confirm proposed level of supervision, if any, during construction and the name of the builder undertaking the work		Yes/No
Foundation	N	Excavation prior to concrete being poured		Yes/No
Substructure/ drainage	N	Drain test for full system		Yes/No
Superstructure Superstructure	N	Structural frame and insulation before plaster board fitted (including wall ties/lateral restraint) Compartment walls/ceilings at roof level to ensure complete separation provided	Photographs as part of sampling process	Yes/No Yes/No
Superstructure	N	Separating walls/ceilings prior	Photographs as	Ves/No
Superstructure		to installation of suspended ceilings/service cavities	part of sampling process	163/110
Superstructure	N	Fire collars/fire shutters/ service penetrations through walls/floors	Photographs as part of sampling process	Yes/No
Completion	М	Final inspection of each individual unit		Yes/No
Completion	M	Testing and integration of alarms and ancillary fire safety equipment including SHEVS		Yes/No
Completion	M	Submit Completion Certificate and any relevant paperwork. No occupation of building before completion accepted (see notes)		Yes/No

Annex D - Case Study

D1. Erection of Care Home

This case study is an example of a completed CCNP document for the erection of a single storey care home. The application of the non-domestic methodology has highlighted a number of factors which increase the risk profile of this type of building including, the condition of the occupants (sleeping/limited mobility) and level of compartmentation, sub-compartmentation and separation.

The risk profile for this type of building would increase further if it were multi-storey bringing into consideration compartment floors, and lift/stair enclosures. The risk profile may further increase due to the inclusion of other factors listed in Annex B.

IMPORTANT DOCUMENT

BUILDING STANDARDS CONSTRUCTION COMPLIANCE NOTIFICATION PLAN (CCNP)					
	PRO	JECT DETAILS			
Reference No:		13/*			
Proposal:		Erection of Care Home (sing	e storey)		
Site Address:		Applicant Details:			
Contact Details for In	Contact Details for Inspecting Officer:		Name:		
		Tel:			
		Mob:			
		Email:			
Key Construction Stages (Site visit)	Status	Notes for Applicant	Appropriate alternative evidence (Non-site visit)		
Commencement	Mandatory	Send commencement to Verifier at least seven days prior to starting on site. Please confirm proposed level of supervision, if any, during construction and the name of the builder undertaking the work			
Foundation	Notify	Excavation prior to concrete being poured			
Drainage	Notify	Drain test for full system			
Superstructure/ Insulation	Notify	Timber frame and insulation before plaster board fitted (including wall ties/lateral restraint)			

BUILDING STANDARDS CONSTRUCTION COMPLIANCE NOTIFICATION PLAN (CCNP)				
Sub compartments/fire hazard rooms	Notify	Sub compartment walls/ ceilings prior to installation of suspended ceilings/ service cavities		
Fire collars/smoke control/fire dampers/ shutters	Notify	Fire collars/dampers/ fire shutters/service penetrations through walls/ floors		
Fire alarm/hold open devices/fire shutters/ emergency lighting/ zoning plans	Notify	Testing and integration of alarms and ancillary fire safety equipment Zone plans fitted close to panel		
Completion	Mandatory	Submit Completion Certificate and any other relevant paperwork (see notes)		
Compartment walls/ ceilings	Notify	Compartment walls/ceilings at roof level to ensure complete separation provided		

Notes to Applicant/Developer:

- 1. At present "Any Council" Building Standards is the appointed Verifier for the "Any Council" area.
- 2. The owner or developer should notify the Verifier at the target key construction stages above, to allow the Verifier to check compliance with Building Regulations. The number and nature of the site inspections may vary according to the type of works being undertaken.
- 3. Notification, by whatever means, should allow sufficient time for the Verifier to respond.
- 4. Form J as provided in your Building Warrant Approval Pack.
- 5. Once the applicant or developer is satisfied the project is complete and complies with Building Regulations, they must sign and submit the Completion Certificate (Form 5) to the Verifier. The submission should also include the additional supporting information required by the Verifier (e.g. Certificate of Construction, Form Q, copy EPC/Sustainability Label etc.) all as indicated on the accompanying checklist. This list may not be exhaustive.
- 6. Checks throughout construction normally centre on site visits although other methods to check compliance may be accepted such as photographs, inspection/test reports or certificates of construction issued by an accredited Certifier of Construction. Photographs should be submitted to and agreed by Building Standards prior to the relevant stage of works progressing. They must give clear indication of construction, structural elements, or materials used and clearly indicate construction location. Building Standards reserves the right to reject alternative evidence upon submission. For further guidance on acceptable photographic evidence please contact the Building Standards Section.

IMPORTANT DOCUMENT

Completion Checklist				
Applicant:	Any Council	Agent:	Chief Architect	
Reference No:	13/00002/NDOM5			
Building Address:		Plot No:]1	

This checklist gives details of the additional information/evidence that we require before we accept your Completion Certificate. To aid the process it would be preferable if all paperwork was submitted at the same time as your completion certificate.

Annex D - Case Study

Checklist				
Element	Applicable	Required	Received/Checke	
Procedure				
Form 5 Completion	1 May 2005 onwards			
Formal Approved Roads Address			16 1	
Amendment to Warrant				
As-Built Drawings				
Extension to Warrant required	1 May 2005 onwards	5 0 1945		
Structure			-	
Form Q				
Roof Truss Certificate	1 May 2005 onwards			
Fire			•	
Fire Alarm Certificate				
Intumescent Paint Certificate				
Sprinkler Commissioning Certificate				
Emergency Lighting Certificate				
Fire Safety Design Summary	1 October 2013 onwards			
Environment				
Certificate of Construction	1 April 2010 onwards			
(Plumb/Heat/Drain)				
Additional Fee – No Certificate of				
Construction		2		
Boiler Commission Certificate		0		
Gas Safety Information				
Unvented Hot Water Competence		-		
Scottish Water Approval				
Heat Pump Installation Certificate		d		
Whole House Ventilation System				
Certificate				
Drain Test				
Safety				
Certificate of Construction (Electrics)	1 May 2005 onwards			
Additional Fee – No Certificate of Construction				
Electrical Certificate - BS7671				
Lift Commissioning Certificate		3		
Noise		<u>.</u>		
Noise Test Certificate	For Building Warrant Applications made on or after: *1 May 2011 – Flat/Maisonettes *1 October 2011 –Houses/Conversations RDL Checklist (STAS only)			
Energy				
EPC	1 May 2005 onwards			
Proof of Glazing U-Value				
Air Tightness Test Certificate	For Building Warrant Applications made on or after: *If carbon emissions calc states less than 10m/ ³ /m ² h *1 May 2011 – Flat/Maisonettes only *1 October 2011 – all dwelling types			
Sustainability	a source to the an arrowing types	•		
Sustainability Label	For applications made after 1 May 2011			
Miscellaneous	r or approations made after 1 may 2011			
Miscellaneous			U	

D2. Erection of Storage Warehouse

This case study is an example of a completed CCNP document for the erection of a single storey warehouse. The application of the non-domestic methodology has highlighted a minimal number of factors which affect the risk of non-compliance for this type of building and this is reflected in the CCNP below.

The risk profile of this type of building would increase should its size dictate the requirement for compartmentation or position require boundary protection or if the design in any way required the submission of an alternative fire engineered solution. The risk profile would also increase should the contents stored be high risk such as whisky, which in some cases would necessitate the installation of a fire suppression system in relation to compartment sizes.

BUILDING STANDARDS CONSTRUCTION COMPLIANCE NOTIFICATION PLAN (CCNP) PROJECT DETAILS Reference No: 13/* **Proposal: Erection of Storage Warehouse** Site Address: Applicant Details: Contact Details for Inspecting Officer: Name: Tel: Mob: Email: **Key Construction Notes for Applicant** Appropriate Status Stages (Site visit) alternative evidence (Non-site visit) Commencement Mandatory Send commencement to Verifier at least seven days prior to starting on site. Please confirm proposed level of supervision, if any, during construction and the name of the builder undertaking the work Foundation Notify Excavation prior to concrete being poured Notify Drain test for full system Drainage Notify Superstructure Steel frame, fixing of cladding and roof panels (including wall ties/lateral restraint) Completion Mandatory Submit Completion Certificate and any other relevant paperwork (see notes)

IMPORTANT DOCUMENT

Notes to Applicant/Developer:

- 1. At present "Any Council" Building Standards is the appointed Verifier for the "Any Council" area.
- 2. The owner or developer should notify the Verifier at the target key construction stages above, to allow the Verifier to check compliance with Building Regulations. The number and nature of the site inspections may vary according to the type of works being undertaken.
- 3. Notification, by whatever means, should allow sufficient time for the Verifier to respond.
- 4. Form J as provided in your Building Warrant Approval Pack.
- 5. Once the applicant or developer is satisfied the project is complete and complies with Building Regulations, they must sign and submit the Completion Certificate (Form 5) to the Verifier. The submission should also include the additional supporting information required by the Verifier (e.g. Certificate of Construction, Form Q, copy EPC/Sustainability Label etc.) all as indicated on the accompanying checklist. This list may not be exhaustive.
- 6. Checks throughout construction normally centre on site visits although other methods to check compliance may be accepted such as photographs, inspection/test reports or certificates of construction issued by an accredited Certifier of Construction. Photographs should be submitted to and agreed by Building Standards prior to the relevant stage of works progressing. They must give clear indication of construction, structural elements, or materials used and clearly indicate construction location. Building Standards reserves the right to reject alternative evidence upon submission. For further guidance on acceptable photographic evidence please contact the Building Standards Section.

Note - for the purposes of removing duplication within this guidance the checklist included within the first case study is not repeated for the other case studies.

D3. Erection of Office Building

This case study is an example of a completed CCNP document for the erection of a small to medium sized two storey office block. The application of the non-domestic methodology has highlighted a number of factors which affect the risk of non-compliance for this type of building and this is reflected in the CCNP below.

The risk profile of this type of building would increase should its size dictate the requirement for compartmentation or additional storeys mandate the need for additional fire safety measures. The risk would be further increased should the layout of the office building include atria or if the design in any way required the submission of an alternative fire engineered solution.

IMPORTANT DOCUMENT

BUILDING STANDARDS CONSTRUCTION COMPLIANCE NOTIFICATION PLAN (CCNP)				
PROJECT DETAILS				
Reference No:	13/*			
Proposal: Erection of Office Building				
Site Address:	Applicant Details:			

BUILDING STANDARDS CONSTRUCTION COMPLIANCE NOTIFICATION PLAN (CCNP)				
Contact Details for Inspecting Officer:		Name:		
		Tel:		
		Mob:		
		Email:		
Key Construction Status Stages (Site visit)		Notes for Applicant	Appropriate alternative evidence (Non-site visit)	
Commencement	Mandatory	Send commencement to Verifier at least seven days prior to starting on site. Please confirm proposed level of supervision, if any, during construction and the name of the builder undertaking the work		
Foundation	Notify	Excavation prior to concrete being poured		
Drainage	Notify	Drain test for full system		
Superstructure	Notify	Structural frame and insulation before plaster board fitted		
		(including wall ties/lateral restraint)		
Superstructure - Compartment walls	Notify	Compartment walls/ceilings at roof level to ensure complete separation provided around protected zones		
Completion	Mandatory	Submit Completion Certificate and any other relevant paperwork (see notes)		

Notes to Applicant/Developer:

- 1. At present "Any Council" Building Standards is the appointed Verifier for the "Any Council" area.
- 2. The owner or developer should notify the Verifier at the target key construction stages above, to allow the Verifier to check compliance with Building Regulations. The number and nature of the site inspections may vary according to the type of works being undertaken.
- 3. Notification, by whatever means, should allow sufficient time for the Verifier to respond.
- 4. Form J as provided in your Building Warrant Approval Pack.
- 5. Once the applicant or developer is satisfied the project is complete and complies with Building Regulations, they must sign and submit the Completion Certificate (Form 5) to the Verifier. The submission should also include the additional supporting information required by the Verifier (e.g. Certificate of Construction, Form Q, copy EPC/Sustainability Label etc.) all as indicated on

the accompanying checklist. This list may not be exhaustive.

6. Checks throughout construction normally centre on site visits although other methods to check compliance may be accepted such as photographs, inspection/test reports or certificates of construction issued by an accredited Certifier of Construction. Photographs should be submitted to and agreed by Building Standards prior to the relevant stage of works progressing. They must give clear indication of construction, structural elements, or materials used and clearly indicate construction location. Building Standards reserves the right to reject alternative evidence upon submission. For further guidance on acceptable photographic evidence please contact the Building Standards Section.

Note - for the purposes of removing duplication within this guidance the checklist included within the first case study is not repeated for the other case studies.

D4. Erection of Supermarket

This case study is an example of a completed CCNP document for the erection of a medium sized supermarket. The application of the non-domestic methodology has highlighted a number of factors which affect the risk of non-compliance for this type of building and this is reflected in the CCNP below.

The risk profile of this type of building would increase should its size dictate the requirement for compartmentation and/or a fire suppression system. The risk would be further increased should the layout of the building include an upper level or if the design in any way required the submission of an alternative fire engineered solution for example permitting extended travel distances with the inclusion of a smoke extraction system.

BUILDING STAND	ARDS CONSTRUCT	ION COMPLIANCE NOTIFIC	ATION PLAN (CCNP)	
	PRO	JECT DETAILS		
Reference No:		13/*		
Proposal:		Erection of Supermarket		
Site Address:		Applicant Details:		
Contact Details for In	specting Officer:	Name:		
		Tel:		
		Mob:		
		Email:		
Key Construction Stages (Site visit)	Status	Notes for Applicant	Appropriate alternative evidence (Non-site visit)	
Commencement	Mandatory	Send commencement to Verifier at least seven days prior to starting on site. Please confirm proposed level of supervision, if any, during construction and the name of the builder undertaking the work		

IMPORTANT DOCUMENT

BUILDING STANDA	BUILDING STANDARDS CONSTRUCTION COMPLIANCE NOTIFICATION PLAN (CCNP)				
Foundation	Notify	Excavation prior to concrete being poured			
Drainage	Notify	Drain test for full system			
Superstructure	Notify	Structural frame (including wall ties/lateral restraint)			
Superstructure	Notify	Insulation before surface finishes			
Completion	Mandatory	Submit Completion Certificate and any other relevant paperwork (see notes)			

Notes to Applicant/Developer:

- 1. At present "Any Council" Building Standards is the appointed Verifier for the "Any Council" area.
- 2. The owner or developer should notify the Verifier at the target key construction stages above, to allow the Verifier to check compliance with Building Regulations. The number and nature of the site inspections may vary according to the type of works being undertaken.
- 3. Notification, by whatever means, should allow sufficient time for the Verifier to respond.
- 4. Form J as provided in your Building Warrant Approval Pack.
- 5. Once the applicant or developer is satisfied the project is complete and complies with Building Regulations, they must sign and submit the Completion Certificate (Form 5) to the Verifier. The submission should also include the additional supporting information required by the Verifier (e.g. Certificate of Construction, Form Q, copy EPC/Sustainability Label etc.) all as indicated on the accompanying checklist. **This list may not be exhaustive.**
- 6. Checks throughout construction normally centre on site visits although other methods to check compliance may be accepted such as photographs, inspection/test reports or certificates of construction issued by an accredited Certifier of Construction. Photographs should be submitted to and agreed by Building Standards prior to the relevant stage of works progressing. They must give clear indication of construction, structural elements, or materials used and clearly indicate construction location. Building Standards reserves the right to reject alternative evidence upon submission. For further guidance on acceptable photographic evidence please contact the Building Standards Section.

Note - for the purposes of removing duplication within this guidance the checklist included within the first case study is not repeated for the other case studies.

Annex E - Compliance Overview

The compliance overview provides a simplistic look at key aspects of compliance checks in relation to the Technical Handbooks. It provides examples of key parts of a building under construction which should be considered by the verifier in undertaking reasonable inquiry on any project. The list covers the seven technical sections of the Technical Handbooks.

The overview also highlights where works may be covered by a Certification of Construction scheme, third party accreditation or testing. In addition the stage(s) of construction where that element may be viewable for checking purposes are indicated.

The examples are not exhaustive and intended as guidance only.

Compliance Check	Certification of Construction Scheme under B(S)A 2003	Accreditation, Testing or other confirmation	Timing (Usual)
SECTION 1 STRUCTURE			
Foundations prior to covering up - suitability of formation level, reinforcement type and cover for reinforced concrete		On-site inspection by structural/civil engineer	Early Intermediate
Supports to structural members and connections between structural members – multiple timber studs, trimming around openings, bolted or nailed connections, flitch beams, materials etc.		On-site inspection by structural/civil engineer Timber frame, truss certificates	Intermediate Late
Stability mechanisms – wall ties, lateral restraint, windbracing, stability or racking bracing		On-site inspection by structural/civil engineer	Intermediate Late
Aim: to verify structural aspects are built as design Important factors include: materials, assembly of components, fixings, connection details, trimming around openings and bracing, support to lintels and beams			
SECTION 2 FIRE			
Fire protection of structural members – fire boarding such as plasterboard or intumescent coating system Compartment and separating walls and floors, protected zone onclosures, covity		Third party accreditation (UKAS)* *Note: third party accreditation may	Early Intermediate Late
barriers in ceiling spaces and other voids – location, duration of fire resistance, suitability of fixings, spacings, supports, fire doors, fire dampers, etc.		installation of active or passive fire products. CE Marking, ETA etc. Manufacturers	

Compliance Check	Certification of Construction Scheme under B(S)A 2003	Accreditation, Testing or other confirmation	Timing (Usual)
Fire-stopping of gaps between construction elements and components, service openings and ventilation ducts – integrity of fire separation maintained External walls and roof coverings – fire resistance duration and fire classification relative to boundary distance and height of building Fire fighting facilities – fire-fighting stairs, fire-fighting lifts, fire-fighting lobbies and natural or mechanical ventilation and fire mains for heat and smoke control Active fire safety measures, automatic fire suppression systems, automatic fire	B(3)A 2003	certificate, BBA certificate etc. Intumescent paint certificate Eurocode or BS commissioning certificates Testing	
detection and alarm systems, automatic me lighting – number, location and type of components are in accordance with design, hazard classification consistent with fire safety design for the building and the Fire Safety Design Summary			
Aim: to verify structural fire protection, fire compartmentation, separating constructions, and fire resisting enclosures and barriers are built as design using correct materials and sizes and fixing systems			
Important factors include: materials, assembly of components, integrity between elements and at service and other penetrations, cavity barriers, fixings, use of fire-engineered solutions and active fire safety measures, manual and automatic controls, components			
SECTION 3 ENVIRONMENT			
Site preparation and sub-structure – damp proof courses, membranes, tanking, radon protection (specialist membranes / sumps etc), remediation or treatment works and contaminant removal		Ground treatment by specialists Specialist reports	Early Intermediate Late
Flooding and groundwater, de-watering or flood resilient/resistant construction measures			

Compliance Check	Certification of Construction Scheme under B(S)A 2003	Accreditation, Testing or other confirmation	Timing (Usual)
Aim: to verify protection measures are built as design using correct materials and fixing systems Important factors include: materials, assembly of components, integrity between elements and at service and			
other penetrations			
Surface and waste water drainage systems – drainage and sanitary pipework sizes, falls, ventilation, access and protection, and re-routing of existing drains	SNIPEF	 Specialist reports e.g. Scottish Water approved contractors Report SUDS experts 	Early Intermediate Late
septic tanks and infiltration systems – location, ground suitability and type of proprietary systems, engineered infiltration systems as designed		Bio-discMound systems	
Sanitary facilities and access to them – number, design and location of facilities		Testing	
Aim: to verify drainage systems, wastewater treatment plants and sanitary facilities are built as design using correct materials and other design parameters Important factors include: water efficient fittings, ventilation, pipe falls, access points, bedding and surround, testing			
Penetration of moisture to the inside of building and surface or interstitial condensation – floor, wall, roof and other exposed elements are as stated on approved building warrant, e.g. Correct type of brick		Masonry product verification (exposure ratings etc.) Commissioning certificates	Early Intermediate Late
Ventilation – natural, mechanical ventilation or combined systems Natural lighting (domestic) – daylighting to apartments including when built over by		Testing	
conservatories or extensions Aim: to verify externally exposed elements are built as design using correct materials and other design parameters			

ATTIES L - COMPTIATICE OVERVIEW

Compliance Check	Certification of Construction Scheme under B(S)A 2003	Accreditation, Testing or other confirmation	Timing (Usual)
Important factors include: materials, assembly of components, integrity between elements and at service and other penetrations, thermal bridging, maintaining cavities			
Combustion appliances – safety operation, protection from combustion products, relationship to combustible materials, removal of products of combustion, air supply for combustion and air for cooling	SNIPEF	Expert report e.g. Gas Safe Report / Certificate Commissioning certificates Testing	Intermediate Late
Aim: to verify combustion appliances, flues and associated constructions are built as design using correct materials and safety systems			
Important factors include: location, and proximity to other construction, of appliances, flues, chimneys and terminals; hearths; integrity of appliance, flue and chimney connections; natural ventilation; spillage test where mechanical extraction, carbon monoxide detection, inspection points			
Fuel storage – gas tanks, oil tanks or woody biomass fuel storage		SEPA consent for larger oil installations	Late
Aim: to verify fuel storage installations are built as design using correct materials and safety systems			
Important factors include: location, and proximity to other construction, of gas, oil and woody biomass storage; support bases; risk assessment for oil tank catchpits			
Dungsteads and farm effluent tanks – pollution control and safety from falls		Agricultural type certificates	Intermediate Late
Aim: to verify silage effluent storage constructions are built as design using correct materials and safety systems			

Annex	Е	- Com	pliance	Overview
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Compliance Check	Certification of Construction Scheme under B(S)A 2003	Accreditation, Testing or other confirmation	Timing (Usual)
Important factors include: location, and safety measures where injury from falls is possible			
SECTION 4 SAFETY			
Access to buildings – car parking, setting down points, accessible routes and entrances			Intermediate Late
Access within buildings – corridors, surfaces, lobbies, internal doors widths, vertical circulation within and between storeys, sleeping accommodation and fixed counters			
Stairs and ramps – width, rise, going, tread and pitch, landings, warning surfaces, handrails and headroom			
Aim: to verify access to and within buildings is built as design using correct materials and design parameters			
Important factors include: stair and ramp dimensions, landings and headroom, handrails and surface finishes			
Pedestrian and vehicle protective barriers – edge protection to floors, stairs, ramps and other changes in level			Intermediate Late
Aim: to verify barriers for preventing accidental or vehicular falls are built as design using correct materials and fixing systems			
Important factors include: location, height, form, and structural integrity			
Electrical safety and aids to communication – electrical installations including low and extra-low voltage	SELECT NICEIC	Expert installation / commissioning report	Intermediate Late
systems			
Aim: to verify electrical installation work is as design using correct materials and safety systems			
Important factors include: electrical installation work is inspected and tested by persons with sufficient competency			

Compliance Check	Certification of	Accreditation,	Timing
	Scheme under	confirmation	(Usual)
Danger from accidents – projections, glazing, cleaning and guarding of windows	SNIPEF	Unit /Package certification	Intermediate
and rooflights, escalators, passenger conveyors and roof access		Testing	Late
Danger from heat – unvented hot water storage systems, hot water discharge from sanitary fittings		Secured by Design	
Security of vulnerable doors and windows (domestic)			
Aim: to verify various safety features for people using buildings and security features are built as design using correct materials and safety systems			
Important factors include: projections into circulation routes or spaces; impact with glazing; cleaning of windows and rooflights, and guarding; access to roofs; unvented HW system safety devices; vulnerable doors and windows			
Fixed Seating for an audience or spectators – wheelchair spaces			Late
Aim: to verify wheelchair spaces are built as design			
Important factors include: location and numbers			
Liquefied petroleum gas storage – fixed tanks and cylinder storage systems			Late
Aim: to verify LPG fuel storage installations are built as design using correct materials and safety systems			
Important factors include: location, and proximity to other construction			
Important factors include: location, and proximity to other construction			
SECTION 5 NOISE			
Noise separation – separating walls and		Robust Details	Intermediate
Noise reduction – walls and floors between a room capable of being used for		Testing	Late

Compliance Check	Certification of Construction Scheme under B(S)A 2003	Accreditation, Testing or other confirmation	Timing (Usual)
sleeping and internal space where noise is likely to occur			
Aim: to verify separating walls and floors, internal walls and floors, and associated constructions are built as design using correct materials and fixing systems			
Important factors include: materials, assembly of components, integrity between elements and at service and other penetrations, post-completion testing			
SECTION 6 ENERGY			
Building elements forming the insulation envelope – roof, walls, floors, windows, doors, rooflights, junctions, service and other penetrations		Manufacturer data sheets (e.g. in support of product substitution)	Intermediate Late
Fixed building services -		Test results (for infiltration)	
 Heating systems – appliance efficiency, appliance and system heating controls 			
 Insulation of pipes, ducts and vessels – pipes and ducts for space heating and space cooling, and hot water vessels 			
 Mechanical ventilation and air conditioning, artificial and display lighting, metering – efficiency and controls, metering and sub-metering to record fuel and power use 			
Aim: to verify elements contributing to the energy performance of the building are built as design using correct materials and fixing systems			
Important factors include: materials, assembly of components, thermal bridging, integrity between elements and at service and other penetrations, air infiltration, post-completion testing			
Commissioning building services, written information and EPCs – inspection and commissioning of building services installations, logbook for energy system operation and maintenance, inspection		Commissioning certificates and test results for installed systems	Late

Compliance Check	Certification of Construction Scheme under B(S)A 2003	Accreditation, Testing or other confirmation	Timing (Usual)
intervals for air conditioning systems, and energy performance certificate (new build) affixed to building			
Aim: to verify that installed systems are operating to deliver the level of performance specified in the building warrant and that adequate information is provided to building users to enable correct and efficient operation of systems once building occupied Important factors include: completeness of commissioning information and supporting test results in recognised format; clear and concise information to building owner, including manufacturer's operating instructions for all equipment fitted			
SECTION 7 SUSTAINABILITY			
Sustainability – aspects relevant to the sustainability level, sustainability label affixed to building			Intermediate Late
Aim: to verify the level of sustainability for the building is visible Important factors include: aspects of sustainability level are covered by the other sections			

Annex F - CCNP List Values

For verifiers use in order to establish a level of consistency in populating the CCNP for each project, these lists are not exhaustive.

Key Construction Stage – describes the general stage of construction to inform notification.

Values may include:

- Commencement
- Foundation
- Sub-structure
- Drainage
- Superstructure
- Fit out
- Completion

Notes for applicant – provides more information to aid notification where specific elements of the building require to be checked.

Values may include:

- · Excavation prior to concrete being poured
- Contamination
- Radon measures
- Substructure
- Solum
- Basement
- Drain open
- Structural elements
- Structural frame and insulation before plaster board fitted
- Compartmentation (walls and floors)
- Sub-compartmentation (walls and floors)
- · Final inspection of each individual compartment
- All separating walls/ceilings prior to installation of suspended ceilings/service cavities
- Fire collars/fire shutters/service penetrations through walls/floors

- Testing and integration of alarms and ancillary fire safety equipment
- Final drain test
- Submit Completion Certificate and any relevant paperwork
- Disruptive inspection required (Late warrant application) (alternative evidence may also be accepted)

Appropriate alternative evidence – details the information to be provided to the verifier in lieu of a physical site inspection.

Values may include:

- Certificate from an Approved Certifier of Construction
- Statement from Chartered Structural Engineer who designed the building or Engineer acting on behalf of design engineer
- Photographs
- Test reports

Annex G - Alternative Evidence

Verification checks throughout construction will normally centre on site visits although other methods can be used to check for compliance with the building regulations.

Photographs

Appropriate photographs can be accepted by building standards staff to aid the process of reasonable inquiry in the acceptance of completion certificates.

Photographs can be used to:-

- · Demonstrate compliance with approved drawings or building regulations
- · Demonstrate that a particular design feature has been fully complied with
- · Clarify construction of a particular element of a building
- Demonstrate the dimension of a particular element or material
- Demonstrate the structural details of a particular construction.

Photographs or any accepted information should:-

- Give clear indication as to the date the photograph was taken
- · Give clear indication as to the subject matter
- If used to indicate a measurement, give conclusive evidence of the measurement in question. For example this may be by having a tape measure as part of the photograph
- Give clear and unambiguous indication of the construction, structural elements, or materials used
- Contain in the photograph a clear indication of the location of the subject of the photograph and where the photograph was taken from.

Third party Certification

Certification of the installation of products, components or materials by other 3rd party schemes can provide evidence towards compliance with relevant building standards. Many certification bodies which approve such schemes are accredited by the United Kingdom Accreditation Service.

This annex may be expanded in due course to provide guidance on a range of alternative evidence options i.e. Certification of Construction etc.