

Gigaclear Documentation Network Build Specification Release Notes

1. Introduction to the Network Build Specification – 2019.11-1

It's fair to say we've had a flurry of feedback from the first new Network Build Specification version in years, most of it positive. Consequently, however, we've tried to incorporate all the feedback and make changes to improve both the coverage and clarity of the specification – hence the months-long delay for those who asked for changes back in August! The pack has undergone a lot of small changes which should help to clear up ambiguous statements or complicated scenarios in the field, based on feedback from contractors as well as input from our Delivery teams. A large number of new documents have also been introduced to help provide detailed guidance on specific topics.

In the next release we'll start to make more structural changes to make the pack easier to use and begin to introduce "quick reference" guides and checklists more suitable for use in the field. We're also ramping up our auditing and photography of the good and the bad on our network and will start to provide more visual guidance throughout these packs.

As ever, change to these documents only comes about through feedback from the field. There is a summary of the changes in this release in the section below. The network-standards@gigaclear.com address continues to be the place to send feedback, but internal Gigaclear staff members can now also find a form (and other useful information, news and updates) on our internal Sharepoint site: <https://gigaclear.sharepoint.com/ceng/>

We deeply value the feedback we've gotten so far from all parties. The discussions have always been positive, constructive, and show the thought that goes into building the network. I hope that these conversations will continue so that we can continue to improve how we build our network as a team.

James Harrison, Chief Engineer

Versioning

This pack is versioned individually and as a whole; specific documents carry version numbers and have a list of changes at the end of the document. This makes it easier to identify where changes have occurred. A change list is also included in this README document.

These documents are versioned "semantically", meaning that any changes which have significant implications or require immediate attention will increase the first number (e.g. version 1.0 would go to 2.0).

Other changes will increase the second number (e.g. 1.0 to 1.1). These changes are immaterial or clarify guidance rather than introducing any changes that have significant commercial implications.

The pack is versioned by release date and version – 2019.06-1 is the first release of June 2019.

Providing Feedback

These documents are being maintained by the Gigaclear Engineering function. Feedback should be sent to network-standards@gigaclear.com which will reach the Chief Engineer and others who maintain and contribute to the standards.

We welcome the submission of all forms of feedback, including photographs from the field, comments, and suggestions. All feedback will be considered carefully.

We will not use photographs or other feedback sent to this address for any purpose other than improvement of standards.

2. Changes from Previous Versions

2019-12-05 – Release 2019.12-1

This is the first major change to the NBS since public release. Feedback from dozens of contractors, delivery, design, inspection, and commercial staff has been incorporated, along with improved specifications and guidance from equipment suppliers and vendors.

Several new documents have been added:

- Underground CDC Guidance – clarifies how to install underground CDCs until the revised underground CDC product is available (anticipated in Q1 2020)
- Third Party Infrastructure Guide – covers Gigaclear's current use of Openreach infrastructure including permitted cables, bore capacities, and process for usage
- MDU Guidance (*Preview*) – a preview of our MDU policy and components, still subject to change; this is available for users to provide feedback on and in support of some limited trials taking place in the next few months
- Active Cabinet Guide – a quick reference to the current cabinets that Gigaclear uses, their design limitations, and how to properly configure and build their internals
- Self-Install Guidance – a document intended for public consumption to aid homeowners with long driveways in installing ducts to their property in a way we can use for installation

Supporting documents and drawings have been added:

- Additional drawings have been included for new cabinet bases (Generation 2 Large and Small cabinets)
- Label templates have been provided for PIA labels, to be used with HellermannTyton TT430 label printers and 100x15mm TipTag labels

In existing documents, many changes have been made; detailed change notes can be found in the version history section of each document. A summary is below.

2.1.1. Optical Guidance

- Improved clarity on connector testing and strain relief boot requirements
- Added specification for hardened connector types
- Added specification for splitters
- Added section on fibre optic closures

2.1.2. Civils Guidance

- Added clarifying notes on expected blowing distances and handling of failed cable blows
- Clarified depth of cover in several scenarios with elevated verges near roads
- Added note on reinstatement within 600mm of the carriageway in unmade ground
- Added rebar requirement to cabinet base construction notes
- Added construction details for Generation 2 Large and Small cabinets
- Allowed the use of 50mm ducts in CDCs and chambers
- Added note on acceptance into service of damaged pots
- Added details on carriageway pot construction and usage
- Aligned chamber construction specification with guidance from Cubis, notably removing the requirement for concrete to be used in the base of footway chambers
- Added section 7.11 on construction in existing ducts to support PIA construction methods

2019-07-22 – Release 2019.07-1

This version is the first externally-issued specification revision since the “NBS 2.0” release.

- Added specification details for optical splitters
- Clarified details on strain relief boot sizes and testing parameters
- Added section on hardened connectors
- Clarified wording on as-built documentation of cabinets, and added section on as-built documentation of ducts clarifying that joints/seals must be included in chamber/cabinet/trench as-built photographs

2019-06-21 – Release 2019.06-2

This is a minor revision which adds:

- Improved trench diagrams to be clearer about depth of cover, and added cut-away renderings showing trench construction (Drawings/Trench Drawings)
- Documentation of the EXFO iOLM and OTDR software (Specifications and Guides/Optical Build and Testing – OTDR-iOLM SOP v1)

2019-06-14 – Release 2019.06-1

This was the initial release of the specifications internally. Compared to the prior releases (the MSA 1.1 and NBS 2.0 packs) there are no significant material changes to the content, but the format of the pack has been improved and a number of inconsistencies have been resolved. Considerable detail has been added to improve clarity of information.