

MCT BRATTBERG

FORAN CABLE TRANSIT DATABASE

FINAL DELIVERY DESCRIPTION

Family packages · consolidated database · macros · resources · FNORM · Cable Transits



Document	Client final delivery description
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OBJECTIVE. Document the content and structure of the final MCT Brattberg FORAN Cable Transit Database delivery, identify the supported families and deployment options, and define the rules for using the family-specific and consolidated packages.

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1. Final delivery overview

The final package provides the complete MCT Brattberg Cable Transit Database developed for FORAN. It is organised so that the client can install only the required product families or deploy the complete database in a single controlled operation.

28	1,600+	2	2
product families	catalogue references	deployment modes	FNORM standards

2. Delivery organisation

The database is supplied in two parallel deployment levels. Both contain the same controlled project content, but they are intended for different installation strategies.

Package level	Contents	Recommended use
Family-specific packages	One folder per MCT family containing the family macros, shared include files required by that family, graphical resources and the corresponding Cable Transit import workbook.	Selective installation, testing, maintenance or staged deployment.
Consolidated package	A general folder containing all delivered macros and graphical resources, together with one general Cable Transit workbook containing the complete catalogue.	Full database installation in a new or controlled FORAN environment.

IMPORTANT. For a given deployment scope, use either the family-specific Cable Transit workbook(s) or the consolidated workbook. Do not import overlapping datasets twice unless an intentional update/overwrite workflow is being performed.

2.1 Logical package structure

Delivery element	Typical content	Purpose
01_GEOMETRIC_MACROS	<FAMILY> / *.ele, *.inc, *.png	Geometry and resources for a single family
02_FCABLE_IMPORT	<FAMILY> / Cable Transit *.xlsx	Catalogue records and macro parameters for that family
01_GEOMETRIC_MACROS\00MCT_MACROS	Consolidated macro folder	All unique *.ele/.inc and graphical resources required by the complete database
02_FACBLE_IMPORT\00MCT_CABLE_TRANSITS.XLSX	Consolidated Cable Transit *.xlsx	Complete database import containing more than 1,600 references
03_STEELTRANSFER	MCT_FNORM.xml or equivalent controlled XML	MCT_C circular and MCT_R rectangular penetration standards
04_DOCUMENTATION	Installation video guide + this final delivery description	Deployment procedure, package structure and acceptance guidance

3. Delivered family coverage

The final delivery covers 28 catalogue families. The classification below follows the project master database organisation. A catalogue family may reuse geometry from another family when the physical shape is identical, while retaining separate catalogue identities and article references.

3.1 Rectangular catalogue families (21)

Folder	Family	Checklist
01_GEOMETRIC_MACROS\ALF, E-ALF_MACROS	ALF	☐
01_GEOMETRIC_MACROS\CS_MACROS	CS	☐
01_GEOMETRIC_MACROS\ALF, E-ALF_MACROS	E ALF	☐
01_GEOMETRIC_MACROS\KR 1, 2, 3_MACROS	KR	☐
01_GEOMETRIC_MACROS\RFCS_MACROS	RFCS	☐
01_GEOMETRIC_MACROS\RGB_MACROS	RGB	☐
01_GEOMETRIC_MACROS\RGO_MACROS	RGO	☐
01_GEOMETRIC_MACROS\RGG_MACROS	RGG	☐
01_GEOMETRIC_MACROS\RGG-O_MACROS	RGG-O	☐
01_GEOMETRIC_MACROS\RGGO_MACROS	RGGO	☐
01_GEOMETRIC_MACROS\RGS_MACROS	RGS	☐
01_GEOMETRIC_MACROS\RGS-BTB_MACROS	RGS-BTB	☐
01_GEOMETRIC_MACROS\RGSC_MACROS	RGSC	☐
01_GEOMETRIC_MACROS\RGSC-BTB_MACROS	RGSC-BTB	☐
01_GEOMETRIC_MACROS\RGSF_MACROS	RGSF	☐
01_GEOMETRIC_MACROS\RGSFB_MACROS	RGSFB	☐
01_GEOMETRIC_MACROS\RGSFBO_MACROS	RGSFBO	☐
01_GEOMETRIC_MACROS\RGSFO_MACROS	RGSFO	☐
01_GEOMETRIC_MACROS\RGSK_MACROS	RGSK	☐
01_GEOMETRIC_MACROS\RGSR_MACROS	RGSR	☐
01_GEOMETRIC_MACROS\RGSR-BTB_MACROS	RGSR-BTB	☐

3.2 Circular catalogue families (7)

Folder	Family	Checklist
01_GEOMETRIC_MACROS\CCM_MACROS	CCM	☐
01_GEOMETRIC_MACROS\MSR_MACROS	MSR	☐
01_GEOMETRIC_MACROS\RGP_MACROS	RGP	☐
01_GEOMETRIC_MACROS\SFR_MACROS	SFR	☐
01_GEOMETRIC_MACROS\SFRB_MACROS	SFRB	☐
01_GEOMETRIC_MACROS\SFRBO_MACROS	SFRBO	☐
01_GEOMETRIC_MACROS\SR_MACROS	SR	☐

IMPORTANT:

SR SLEEVE – Article Number Convention. For the SR SLEEVE references, no specific manufacturer Article Number was available in the source documentation.

To maintain a consistent and unique identification within the FORAN Cable Transit database, an internal STOCK_CODE convention was established using:

Nominal sleeve diameter (3 digits) + corresponding SR Article number.

Example:

SR SLEEVE 25 → 025-5-00380250

This convention is used only for database identification purposes and **does not represent an official MCT Brattberg Article Number.**

4. Macro grouping philosophy

The number of FORAN macros is intentionally lower than the number of catalogue references. References are grouped only when they can be represented safely by the same deterministic geometry and parameter logic.

- Equivalent material variants can reuse the same geometry when the manufacturer dimensions are identical. The catalogue records remain separate so that article number, material and weight are preserved.
- Geometrically different types or arrangements are separated into different macros instead of relying on a runtime selector that could introduce ambiguous or non-persistent values.
- Repeated construction logic is moved to shared .inc files where appropriate. The dependent .ele and .inc files must therefore be deployed together.
- Macro filenames follow the FORAN-compatible eight-character naming constraint used throughout the project. Delivered filenames must not be renamed after the Cable Transit workbooks have been generated.
- Graphical resources (.png) are part of the controlled macro set and must keep the filenames referenced by the corresponding macro.

EXAMPLE - ALF. The final ALF implementation is grouped by frame arrangement: 1x1, 1x2, 2x1 and 2x2. The macro parameters represent the cable installation area per frame, while the macro generates the corresponding overall geometry and cutout for the selected arrangement.

5. Family-specific package contents

Each family folder is self-contained for selective deployment. Only files required by that family are included; therefore, the exact number of .ele, .inc and image resources can vary from one family to another.

File type	Purpose	Delivery rule
.ele	FORAN electrical geometric macro	Mandatory for every delivered geometry. Do not rename.
.inc	Shared macro routines / geometry definitions	Included only when called by one or more .ele files in the family.
.png	Macro Editor preview / selection information	Keep accessible under the exact filename used by MAC_ICON.
.xlsx	Family Cable Transit import workbook	Contains the catalogue records and macro parameters for that family.

6. Consolidated package contents

The consolidated folders are provided to simplify complete installation of the database. They gather the unique macro/resource set and the complete Cable Transit catalogue without requiring the client to process each family folder individually.

Consolidated item	Content	Use
01_GEOMETRIC_MACROS	All macros/resources delivered .ele files, the required .inc files and their graphical resources .png	Copy as one controlled set to the configured FORAN electrical macro location.
02_FCABLE_IMPORT	Complete catalogue covering all delivered families and more than 1,600 references	Use for full database import in FCABLE.
03_STEELTRANSFER	MCT_FNORM.XML, MCT_C and MCT_R penetration standards	Import the FNORM once in the target project before Cable Transits that depend on them.
04_DOCUMENTATION	Installation/Import video Guide and Final Delivery Description	Use the installation video guide for the step-by-step FORAN procedure; use this document as the delivery manifest and organisation reference.

6.1 Selective vs. complete deployment

- Selective deployment: copy the macro and resource files for the required family or families from **01_GEOMETRIC_MACROS\...**, and import only the corresponding family-specific Cable Transit workbook from **02_FCABLE_IMPORT\...**. The **MCT_FNORM.XML** file only needs to be imported once.
- Complete deployment: copy the consolidated macro and resource files from **01_GEOMETRIC_MACROS\00MCT_MACROS**, import **03_STEELTRANSFER\MCT_FNORM.XML** once, and then import the general Cable Transit workbook from **02_FCABLE_IMPORT\00MCT_CABLE_TRANSITS.XLSX**.
- Both methods use the same controlled macro filenames and database relationships; the difference is only the deployment scope.
- When replacing a family in a later revision, replace its macro and resource files as one set. Avoid mixing files from different delivery revisions.

7. Penetration standards (FNORM)

The final delivery includes the parametric hole standards referenced by the macros through MAC_PNTN. The standards are loaded into the target FORAN project through STEELTRANSFER as described in the separate Installation and Import Guide.

Standard	Definition	Role
MCT_C	Circular hole standard	Used for circular/round transit geometries requiring a circular structural opening.
MCT_R	Rectangular hole standard	Used for rectangular transit geometries requiring a rectangular or radiused structural opening.

LOAD ORDER. FNORM definitions must be available in the target project before importing Cable Transit records that reference them.

8. Cable Transit database delivery

Cable Transit data is supplied both by family and as a consolidated import. The workbooks preserve the FORAN import structure and link each catalogue record to the macro and parameter values required to generate its geometry.

Workbook type	Scope	Recommended use
Family workbook	Only the references belonging to one family	Controlled selective import and family-level maintenance
General workbook	All delivered references across the 28 families	Single complete FCABLE import for the entire MCT database

8.1 Critical relationships

- The macro filename stored in the Cable Transit record must match the delivered .ele filename exactly.
- Macro parameter rows must remain associated with the corresponding Cable Transit record; do not restructure the supplied import workbook before loading it into FORAN.
- Family-specific and consolidated workbooks represent alternative loading scopes, not independent duplicate databases.
- Article identity, material, dimensions, weight, frame arrangement and installation/cutout information are preserved at catalogue level even when multiple references reuse the same geometry macro.

9. Validation performed during development

The final package is the result of iterative comparison, macro development and FORAN testing performed family by family. The validation effort focused on the elements that directly affect catalogue use and 3D placement.

- Cross-check of manufacturer drawings and available installation information for the delivered families and variants.
- Review of principal dimensions, material-dependent references, catalogue/article numbers and frame arrangements.
- Macro Editor verification of geometry, parameters and preview resources.
- FORAN placement tests for representative references, including orientation and insertion-point behaviour.
- Verification of penetration/cutout behaviour and use of the project FNORM definitions where applicable.
- FCABLE import testing using the same workbook structure supplied in the delivery.
- Progressive cleanup of macro files for client delivery, removing development comments while preserving controlled headers and executable logic.

10. Delivery checklist

The following checklist constitutes the final delivery verification record for the package described in this document. Each item should be confirmed against the delivered folder structure and the applicable FORAN import procedure before formal client acceptance.

Delivery control item	Verification / acceptance criterion	Checklist
Delivered family coverage	All 28 delivered catalogue families are present and correspond to the family coverage listed in Section 3: 21 rectangular families and 7 circular families.	☐
Family-specific geometric packages	Each delivered family folder contains the required FORAN geometric macro files (.ele), any shared include files (.inc) used by that family, and the graphical resources (.png) referenced by the macros.	☐
Consolidated macro/resource package	01_GEOMETRIC_MACROS\00MCT_MACROS contains the complete controlled set of unique macros, required include files and graphical resources for full database deployment.	☐
Family Cable Transit workbooks	The family-specific Cable Transit workbooks are supplied under 02_FCABLE_IMPORT and contain only the catalogue records and macro parameters belonging to the corresponding family for selective loading.	☐
General Cable Transit workbook	02_FCABLE_IMPORT\00MCT_CABLE_TRANSITS.XLSX is supplied for complete loading and contains the consolidated catalogue covering all 28 delivered families and more than 1,600 references.	☐
FNORM delivery	03_STEELTRANSFER\MCT_FNORM.XML is included and provides the MCT_C circular and MCT_R rectangular penetration standards required by the delivered macros. It only needs to be imported once in the target project.	☐
Macro and resource naming	Delivered .ele, .inc and .png filenames are preserved exactly as supplied. Macro names respect the FORAN-compatible naming constraints and graphical resources retain the filenames referenced by MAC_ICON.	☐
Catalogue-to-macro relationships	Macro filenames and parameter values stored in the Cable Transit workbooks correspond to the delivered macro set. Macro parameter rows remain associated with their respective Cable Transit records.	☐
Selective deployment route	For selective deployment, the required family macro/resource folder(s) are copied from 01_GEOMETRIC_MACROS and only the corresponding family-specific Cable Transit workbook(s) are imported from 02_FCABLE_IMPORT. MCT_FNORM.XML is imported once.	☐
Complete deployment route	For complete deployment, the consolidated macro/resource set from 01_GEOMETRIC_MACROS\00MCT_MACROS is copied, MCT_FNORM.XML is imported once, and the consolidated 00MCT_CABLE_TRANSITS.XLSX workbook is imported.	☐
Revision integrity	Macros, include files, graphical resources and Cable Transit workbooks belong to the same controlled delivery revision. Files from different delivery revisions are not mixed.	☐
Final documentation	04_DOCUMENTATION contains the Installation and Import Guide with this Final Delivery Description, providing the deployment procedure, package structure and acceptance reference.	☐

END OF DOCUMENT