Standard Filings, Scope and Requirements

Standard Filings - Types

Design Filing: applies to a complete product design
Component Filing: applies to an individual component
Controller Filing: applies to a controller
Report Filing: the filing of test procedures, acceptance test, manufacturers certificates, 3rd party conformance reports

Standard Design Filings / Component Filings

What is a Standard Design Filing?
A Standard Design Filing is essentially a filing of an entire design for a device which is standardized so that each installation is identical in its design to meet the code requirements and therefore does not require TSSA engineering to review the design for each installation. B355 devices with small variations in travel might be an example of a product suitable for a design filing. Once the design has been reviewed for compliance to the applicable code requirements, it can be filed and referenced for each installation, which has an identical design.

What is a Standard Component Filing?
A Component Filing is a filing of a specific part of a device, which has been standardized so that each installation uses an identical component (part/subassembly) and therefore does not require TSSA engineering to review the design of this component for each installation. Once the component has been reviewed for compliance to the applicable code requirements, it can be filed and referenced for each installation that has an identical component in the design.

What is a Standard Controller Filing?
Like a component filing, a Controller Filing is a specific type of component, which has been identified for filing eligibility. A control design, which is repetitive or standardized in its basic safety circuit principals, can benefit from a filing. Standardized controller schematics, which demonstrate compliance, are filed and therefore TSSA engineering does not require the review of each individual controller submitted. Submitters must however attest to the fact that the control being supplied for a given job is identical to the filing on record.

What is a Certification/Report Filing?
There may be instances where TSSA requests a copy of a particular document to assist in verifying conformance to a requirement. Rather than continuously provide that same documentation, these documents may be filed and the submitter need only reference the TSSA assigned filing number. (eg. type test reports)
Another example would apply to Acceptance Test Reports. Manufacturers who file controllers designs may wish to file ‘acceptance tests’ for their control designs. Acceptance tests document the required field verification test (the test and how to perform it) and the expected outcomes (elevator shuts down, fuse blows…). Once ‘acceptance tests’ are filed,
TSSA Inspectors can verify compliance in the field using a standardized document. This helps to ensure uniform verification and testing of a product, no matter where it is inspected.

Does each design, component, control have to be identical?
No. Some specific parameters can be variable within established guidelines during the filing process to allow standard filings with optional characteristics. A varied range of characteristics is acceptable provided they do not affect conformance to the code. Optional designs should be pre-determined at time of filing if the filing requires a variable or a range for a given parameter. For example, a range for speed or capacity could be permissible in a filing, whereas the actual value (within the permissible range) would be specified at the time of submission.

How does a Filing benefit me?
There are less steps involved in the review of Design, Component, Controller or Acceptance Test, since a safety assessment & filing has already been done. Therefore the submitter can expect little or no delays due to missing information or compliance issues. Less supporting documentation is needed at the time of submission, since the majority of the documentation is already on file with TSSA. In addition, the submitter can request expedited or “RUSH” status for the submission in order to obtain the registration sooner (Rush Fees will apply). TSSA no longer accepts “RUSH” orders for designs which do not contain Controller Filings or Standard Design Filings.

How do I file something?
The first step in filing a design is to submit a ‘Dossier or Design Submission’ for review. The package should be prepared in accordance with good engineering and drafting practices, and should demonstrate that the device or component conforms to a particular code or standard, as specified by the submitter. The submitter should clearly delineate any proposed variances for the code specified. Documents shall include layouts, plans and elevation views of the elevating device or parts thereof, electric, electronic, hydraulic and pneumatic schematic diagrams that indicate safety related circuitry and components, and set out all the information that is necessary to demonstrate conformity.

When programmable devices (FPGA, PLD, Microprocessor, CPLD, PLC,ASIC, etc) are used to fulfill the requirement of one or more of the following code sections: 2.19, 2.20.8, 2.25, 2.26.9.3, and 2.26.9.4, the following documentation shall be included for review:

1. Detailed circuitry schematics related to the programmable device (Board level schematics), and unique identification of the circuitry.

   Exception: Programmable Logic Controller (PLC) specific schematics (circuits inside the PLC) are not required when a PLC is used in elevator control systems. General schematics are still required.

2. Factory Test report to demonstrate compliance with clauses 2.26.9.3 and 2.26.9.4

3. The identification of the program (i.e. Software and Firmware).
If conformance to a code requirement cannot be easily determined from the drawings provided, the submitter shall provide a code conformance document that explains in detail how the design meets the requirement.

For Standard Design Filings, controls (with Electrical Schematics) and Acceptance Tests shall be reviewed and filed separately, but shall remain an integral part of the Standard Design Filing. The review of the documents for code compliance will follow the standard preliminary review fees as outlined in the Fee Schedule. This fee shall be calculated based on an hourly rate. Variances (when required) will also follow the standard Fee Schedule for variances.

Once I have a File Number, *what do I do with it?*
Submit the Design Submission Form for each installation, with the Filing Number indicated in the appropriate box and any optional data indicated as required. It is sufficient to provide the filing numbers alone on the submission form omitting the documents, which make up the filing, provided all the conditions of the filing are meet. While the documents in the Filing need not be submitted (including variances) as part of the Design Submission, they will become an integral part of the submission through the use of the Filing number. A Professional Engineer must still stamp the Design Submission. The Professional Engineer shall submit a statement of attestation from the manufacturer who filed the design to ensure the device is identical in design of the “safety related” components to the filing referenced by the Design Submission. It is acceptable to have minor clerical differences between the filing and the documents provided at the installation, so long as they do not affect the code compliance of the device. The manufacturer/contractor is responsible to make sure the “As Built” documents are on site for the TSSA inspector to view during the initial inspection. It should be apparent to the inspector that the device on site is identical to the filing by use of a serial number or some specific labeling for identification.