Elevator (Conveyance) Program New Product Approval

Date: 2-10-2015, revision to document dated 4-19-2013

Subject of revision:
Updated with latest codes and recognition of ASME A17.7.

Introduction

In an effort to ensure the safety of users of conveyances and occupants of buildings and sites, Wisconsin state statute 101.983(1) and administrative code SPS 318.1007 require plan submittal, review and approval from this department, or agent municipality as applicable, prior to beginning the installation of a conveyance, or the alteration, repair or replacement of important components of a conveyance. Similar requirements in Wisconsin codes and statutes date back to 1926.

As part of the plan review, SPS 318.1007(2)(c) 1.e. and (3)(b) 4. require sufficient data and information for the reviewer to determine the proposed conveyance or components meet minimum requirements.

See SPS 318.1010 for product approval code.

Purpose of Product Approval

All data and information may be submitted for each individual installation or alteration, repair or replacement however the product approval process provides a means to have that data and information accepted and approved one time for components of the conveyance that do not change from one installation to another and for a range of rated loads, speeds and applications. Then the submittal of information for each subsequent installation of the conveyance or component can be limited to only the information unique to that specific installation, alteration, repair or replacement. This can greatly reduce the materials the installing contractor must generate and send for review then provide at the job site for each project. This also makes plan review more timely and efficient by focusing each plan review on those items that can change from one installation to another.

Codes and Standards

Since February 1, 1983 the State of Wisconsin has adopted national standards for the design, installation, maintenance, alteration, repair, replacement, testing and inspection of conveyances.

Currently, the adopted standards are ASME A17.1 - 2013 / CSA B44-13 Safety Code for Elevators and Escalators (including dumbwaiters and type B material lifts) and ASME A18.1 - 2011, Safety Standard for Platform Lifts and Stairway Chairlifts. These standards include
factors of safety and other criteria that must be shown to be provided in the design and construction of the conveyance or components.

As of September 1, 2014, ASME A17.7 - 2007 Performance-Based Safety Code for Elevators and Escalators is now recognized in Wisconsin as an alternative standard for the design of elevators and escalators.

Conveyances or components must be shown to meet one of the adopted codes however this department recognizes the need to permit new technology that may be developed in advance of code updates addressing such technology. Along with the approval of products and components addressed in the adopted standards, new technology not yet addressed in code may be petitioned using the petition for variance process described in Wisconsin administrative code SPS 303.01. A petition for variance must present an equivalent degree of safety to the current adopted code.

Approval of conveyances or components to other standards not adopted in Wisconsin such as European DIN or TUV standards will not be accepted as equivalent.

Determining Whether a Conveyance or Component Requires Product Approval

A conveyance or component that has been previously approved in Wisconsin to a code or standard that is essentially the same as the currently adopted standard is not required to be approved again as a product. There is currently no expiration for existing product approvals.

Verifying Compliance with ASME A17.1 or A18.1

To have a conveyance or component approved, the manufacturer or the installer typically compiles and sends the information for product approval to his department. Information must be in English and must include 1 and either 2A, B or C (or a combination to cover all components).

1). Description of the Device or Component. Include trade name and/or model number(s), list of major components including manufacturer(s), description of materials, diagrams or photographs and an explanation of the device or component operation. Include all limits or ranges of the conveyance operation such as speeds, loads, number of stories, type of use, etc. If a conveyance includes a safety device, governor, device to meet ASME A17.1, 2.19 or 3.17.3, suspension means, interlocks or separate drive machine include the manufacturer, model number and description of those components.

2). Verification of Code Compliance. Submit A, B, C or a combination to include the entire conveyance or component.

A. Per SPS 318.1010(1)(b) 2.a., a letter, certificate or listing by a recognized third party testing laboratory such as CSA, ETL Intertek, Liftinstituut or UL stating the conveyance or component is designed to meet or exceed all applicable requirements of the appropriate adopted standard. This must include the trade name or model number of the device or component and indicate the appropriate standard. A listing is valid only for the tested components. Mechanical and structural components will not be covered by a listing for electrical components, for example.

B. Per SPS 318.1010(1)(b) 2.b., a letter from a Wisconsin-registered architect of professional engineer verifying the device or component is designed to meet or exceed all applicable requirements of the appropriate adopted standard. The letter must bear
the original stamp and signature of the engineer, must include the description of the conveyance or component and indicate the appropriate standard.

C. Information showing the conveyance or component(s) has been approved and successfully used as part of another installation in Wisconsin. This must include the name and address of at least one location.

Note: For information regarding temporary Wisconsin PE registration, contact DSPS Business Professions Licensing at:

Website: www.dspsl.wi.gov
E-mail: dmps@Wisconsin.gov
Phone: (608) 266-5511
Mail to: Wisconsin Department of Safety and Professional Services
P.O. Box 8935
1400 E. Washington Avenue, Room 112
Madison, WI 53708-8935

For Conveyances or Components designed to ASME A17.7

The ASME A17.7 uses global essential safety requirements and a risk assessment process to evaluate conveyance designs. The design is evaluated by an Accredited Elevator/Escalator Certifying Organization (AECO). For a conveyance designed to ASME A17.7 to approved, a letter, certificate or listing by the AECO stating the conveyance or component is designed to meet or exceed all applicable requirements of the A17.7 standard must be provided.

Planning for New Product Review

Product review, plan review and inspections sometimes result in questions and requests for additional information. To avoid delays in approving plans for a specific installation, product approval should be obtained well in advance of applying for plan review for the first installation. Per SPS 318.1010(2)(a) 3., approval of a new product may take up to 45 days after all the necessary information has been provided. This should be considered prior to introducing a new conveyance or component.

Limitations of Product Approval

A conveyance or component may be subject to revocation of product approval if a concern arises about code compliance, validity of engineer's review or listing. At this time a conveyance product approval does not expire. In the future expiration dates may be placed on product approvals.

Fee

At this time a fee is not charged for conveyance safety program product review unless a petition for variance is required. Plan review fees, inspection fees and permit to operate fees apply to each individual installation according to SPS 302.