

**Library of Congress Preservation Directorate**  
**Specification Number 800-851 – 16**  
**Specifications for Stainless Steel Cans**  
**For Long-Term Storage of Motion Picture Film**

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## **I. General Specifications**

The Library of Congress seeks corrosion-resistant containers or cans made of stainless steel for housing its motion picture collection. Must be constructed of grade 304 stainless steel of at least 0.20 but no more than 0.30 gauge.

## **II. Product Requirements**

### **A. Construction**

1. Motion picture storage cans must be designed to protect the contents from any intrusion of water discharged from sprinklers that might be set off in a fire situation. While protecting the contents from getting wet under a torrential water discharge, the design of the cans must at the same time allow the atmosphere inside the container to interact freely with the surrounding environment, and to facilitate the venting of acidic degradation products that would otherwise tend to accumulate within the cans.
2. The cover and the bottom of the can must have a pattern indented into them such that it will enable stacked cans to fit into each other and resist slipping and sliding against each other. For example, a radially emanating pattern akin to spokes in a wheel or like the imprint of a film reel may be indented in such a manner that the impressions on the top and bottom sides mirror each other.
3. The edges on the can and the lid must be beaded and not sharp.
4. It is essential that the lid and the can be so designed that the lid is tightly secured when the can is closed, yet it must be possible to open the lid easily without significant effort or inconvenience.
5. The lid must be constructed so that it has a lip at the edge that is smoothly beaded, and not sharp so as to aid in opening of the can.

6. The design of the can must include a central hub to accommodate standard cores on which film is wound. This hub may be created in the stamping process so that it is an integral part of the can, or it may be constructed separately and attached at the center of the can with a suitable and effective fastener, but welding is not permissible as it can make the can vulnerable to corrosion. If an external hub and a fastener are used, both of them must be made of grade 304 stainless steel. In either case, the hub assembly shall be such as to allow the film reel to sit firmly and flatly on the base of the can while preventing any significant wobble during transportation. The top edge of the hub must not be sharp, and must be smoothly rounded. Also, the fastener - if any - must be recessed so as not to jut out of the bottom of the can.

**B. Dimensions**

1. Cans for housing 800-foot film reels must have an external diameter of 27.5 cm, and those for housing 1200-foot film reels must have an external diameter of 32 cm.
2. The outer thickness of the cans when closed must be 2.5 cm.
3. The lid must be at least 2.2 cm deep to enable convenient placement of labels.
4. The can must adhere to standard dimensions for housing film reel(s) specified for procurement.

**III. Inspection**

**A. Submission of Sample**

A prototype film can must accompany any proposal. This prototype would not have to be dimensionally accurate. However, it must include all other design features specified here to enable the Library of Congress to exercise the best possible judgment in the selection of the product that best meets the Library's needs.

**B. Selection Criteria**

The selected container design will be judged on its ability to meet these essential design criteria stated in sections I and II above.

**Configuration Management**

Date	Revision History
16-Jun-2003	Initial release of document on website, html format.
14-Dec-2009	Reformatted for release as PDF document.
30-Sept-2016	Editorial update to footer.