

Script of CPSC Podcast 2021- Overview of Gates and Enclosures Requirements

Slide 1

The slides used in this podcast are not a comprehensive statement of legal requirements or policy, and thus, should not be relied upon for that purpose. You should consult official versions of U.S. statutes and regulations, as well as published CPSC guidance, when making decisions that could affect the safety and compliance of products entering U.S. commerce. Note that references are provided at the end of the presentation.

Slide 4

Hi, my name is Sylvia Chen, and I want to welcome you to this podcast presentation today.

Slide 5

As CPSC's Director of International Programs, Richard O'Brien stated: "design of safe products at the outset is critical." CPSC is a United States federal government agency charged with protecting the public from unreasonable risks of injury or death associated with the use of consumer products under the agency's jurisdiction. We have developed this podcast series not only to inform about regulations, standards, and other safety requirements, but also to emphasize the importance of designing products with safety considerations in mind, and to offer best practices for enhancing the safety of a variety of common consumer products.

Slide 6

The series covers six common consumer products and the requirements for keeping consumers safe, focusing on products affecting millions of consumers, such as children's sleepwear, wearables, batteries, gates and enclosures, micromobility, and cribs and play yards. In this podcast series, you can expect to learn about the key hazards and risks of the product, important design and manufacturing considerations, regulations and standards that CPSC uses to ensure product safety, best practices you can employ, and what resources are available to assist you in understanding and implementing the requirements.

The podcasts include English and Chinese slide decks and Chinese narration to make this important safety information as accessible as possible. Additionally, CPSC has established a dedicated email box, where listeners, at their convenience, can send in any questions, in English or Chinese. Our staff will monitor the email box and respond to your questions. Transcripts in English are available on this site.

Slide 7

In July 2019, CPSC published notice proposing new safety regulations for gate slides in addition to existing ASTM F1004-19 standard.

In July 2020, the CPSC published its final rule for gates and enclosures. By enforcing the ASTM safety standard, ASTM F1004-19, as a regulation the commission has voted to include additional requirements in the federal rule, which is treated as a technical regulation for enforcement.

These requirements comprise a separate warning label on the top rail of pressure-mounted gates that require wall cups and visual side pressure indicators for all other pressure-mounted gates.

Given these substantial changes, CPSC commissioners voted to extend the 12-month time period between the publication and effective dates for manufacturers to adjust their products to meet the federal rule.

The effective date for the new federal rule is July 6, 2021. Your company should plan accordingly and redesign your products in a timely manner.

Slide 8

During this presentation, we will cover the following:

- The definition of a gate and the definition of an enclosure
- The labeling and instructional literature requirements for gates and enclosures
- Gates and enclosures testing requirements
- The Children Product Certificate
- A few gates and enclosures recall examples
- Additional business resources in English and Chinese

Slide 9

First, I would like to briefly discuss the history of the gates and enclosures rulemaking.

On July 7, 2019, CPSC issued a NPR (Notice of Proposed Rulemaking) on gates and enclosures, and then, on July 6, 2020, it published the final rule.

ASTM F1004-19 is the existing industry consensus standard for gates and enclosures. The new rule that was published in July 2020 incorporates by reference the ASTM F1004-19 standard with two specific modifications for pressure-mounted gates, with which you will be required to comply by July 6, 2021, when the regulation becomes effective.

The two new modifications are as follows:

- Gates with wall cups must include a separate, conspicuous warning label on the top rail of the gate regarding correct installation using the wall cups, in order to meet the 30-pound push-out force test
- Gates without wall cups must use visual side pressure indicators to signal to consumers whether the gate is correctly installed in order to meet the 30-pound push out force test.

Slide 10

ASTM F1004-19 addresses two major issues.

The first is the incidence of head and neck entrapment in children's expansion gates and expandable enclosures. The second is the ability of a pressure gate to resist push-out force.

The requirement does not address incidents in which gates or enclosures are blatantly misused.

Slide 11

We defined both what a gate and an enclosure is in 16 CFR Part 1239. They are similar product types, but they do have some differences:

- A gate is a barrier intended to be erected in an opening, such as a doorway, to prevent the passage of young children, but which can be removed by older persons who are able to operate the locking mechanism. A gate can be between a doorway. It can also be at the top of the stairs.
- An enclosure is a self-supporting barrier intended to completely surround an area or play space within which a young child may be confined.

A gate is erected in an opening and an enclosure is entirely self-supported and surrounds the child entirely.

These products are intended for children ages six months to 24 months.

Slide 12

When defining gates and enclosures in the ASTM F1004-19 industry consensus standard, they use the terms “expansion gates” and “expandable enclosure”.

The CPSC reviewed hazard patterns and indicated that all children’s gates and enclosures present the same hazards, whether they expand or not. Therefore, we decided to remove those terms from the regulatory definition. We just refer to these categories of products as gates and enclosures, not specifically expansion gates and expandable closures, although they are included within that definition.

Slide 13

Here are some examples of gates. As you can see, they are erecting a barrier between two walls or at the top of a staircase. They can also erect a barrier in a doorway.

Slide 14

Here are some examples of enclosures. These products are not affixed to a wall. They are fully self-supporting, and they completely enclose the child within a play area.

Slide 15

Let’s discuss some of these products in more detail.

Is this product an enclosure?

Slide 16

This is a bit of a tricky question, because this product actually doesn't fall into the scope of what we're discussing today. This product is actually what we consider a play yard.

The difference between an enclosure and a play yard is that a play yard has an attached floor, whereas enclosures do not. Enclosures are fully self-supporting with no attached floor.

If your product looks like the product on the right, it must comply with 16 CFR part 1221, the regulatory requirement for Play Yards.

Otherwise, it may be in the enclosures category we are discussing today which is 16 CFR part 1239.

Slide 17

Is this product a child gate or a pet gate?

Slide 18

This gate is actually a child gate. Even though it's shown protecting a barrier for both pets and children, if there is the potential it could be used with children that means that it needs to meet the additional child product regulatory requirements, including those for gates and enclosures.

If your gate is entirely intended for and marketed to pet owners and there's no indication that it's a child gate, that gate would be outside the scope of these federal requirements.

However, marketing makes a huge difference on how the CPSC would view your product and how a consumer would view your product.

Therefore, we strongly recommend visiting [CPSC.gov/childrensproduct](https://www.cpsc.gov/childrensproduct) for more information on how to define your product if you're not sure how it should be classified.

Slide 19

Let's discuss labeling and instructional literature.

The following marking and labeling must be permanently on the product and its packaging, per the federal requirements:

- Your manufacturer, distributor, or seller name
- Per 16 CFR 1130.4, your place of business, including your city, state, and mailing address with your ZIP Code and your telephone number. This is specific to durable infant and toddler products. If you're familiar with children's products, you may know about tracking label information. That is not as strict as the durable infant and toddler labeling requirements, but make sure that the entirety of your contact information is included on the packaging.

- You also must include a code or a mark identifying the date of manufacture for the product. The date must include at a minimum the month and year the product was manufactured.
- Then you should include any additional batch or run numbers that could help identify when that product was created. If you have an issue with one particular production run of your product, having a batch or run number or serial number makes it a lot easier to identify the specific instances of an issue with a product rather than the entire product line, providing the potential to focus the scope of any corrective actions.

Slide 20

Informational statements included with the product need to have the following:

- The assembly, installation, operation, folding, maintenance, and clear instructions as applicable
- All warning statements.
- The size openings on which the product is meant to be used
- Instructions to discontinue use of the product if it becomes damaged, broken, or disassembled.

Gates must have a statement of limitations regarding the use of any included mounting hardware and information regarding where to install the gate relative to the floor. Then, if your gate is going to be used at the top of the stairs, you also need to include a statement saying the minimum distance to the first step of the stairs.

Slide 21

Here is an example of a few of the warning labels that you may require on your product.

The first warning label has the giant hazard symbol along with language saying that children have died or been seriously injured when gates are not securely installed as well as a variety of other warning messages written below.

The second warning label is a specific warning regarding the wall cups saying that they must be installed to keep the gate in place and that without the wall cups, a child can push out and escape.

These warnings must be permanent, conspicuous, and in sans serif font. There are some testing requirements to make sure that those labels are permanent, as well.

Slide 22

Your retail packaging should state:

- The recommended age of the user of the product.
- That the product is not to be used with a child that is able to climb over or dislodge or open the gate
- The applicable opening sizes for the product.

The idea here is that when the consumer goes to the retail establishment, they can determine whether or not this product is appropriate for their child and whether or not it is appropriate for the space in which they're trying to install it.

In addition, retail packaging for products with wall cups should include the following:

- The warning “you must install wall cups to keep the gate in place. Without wall cups, children can push that and escape”.

We saw an example of this label on the previous slide.

Then, if the wall cups or mounting hardware are packed in a hardware bag, that bag shall be marked or labeled with that warning statement, as well, so that the consumer is well aware of that requirement.

Slide 23

So, as I mentioned, the gates and enclosures class of products is under the Durable Infant and Toddler Products category, which means that these products also require a product registration card, which needs to be attached directly to the product. You can find out about this requirement in 16 CFR Part 1130.

This requirement means that you must provide consumers with a postage-paid product registration card and maintain records of the consumers’ names, addresses, emails, and other contact information in the event of a recall so you can contact these consumers.

You must also permanently place the manufacturer name and contact info, model, and name and number and the date of manufacturing for each one of these durable products.

Please refer to the page cited as it goes into these requirements in more detail. It also has some examples that you can look over.

Slide 24

Our next question is “do I need to provide a paper product registration card if I sell direct to consumer and maintain contact information for all of my customers?”

Slide 25

The answer to this question is yes. There is actually no exception to the paper registration card requirements in 16 CFR 1130. You are always going to need to provide that paper registration card directly on the product itself.

Slide 26

Chemical testing requirements apply to all children's products.

The two major requirements are:

- Lead content testing under 15 U.S.C. §1278a

- Lead in paint and surface coatings testing under 16 CFR part 1303

There are two different limits here.

For the total lead content testing, you can have no more than 100 parts per million in accessible parts of children's products.

There are some exemptions to the testing requirements here. If your product is made of:

- wood, paper, or similar materials
- if it is what we call CMYK process printing inks, which are inks that fully embed with the material they're printed on
- natural fibers and manufactured fibers

then it would be exempt under 16 CFR 1500.91 and would not require testing.

For lead in paint and surface coatings, the limit is 90 parts per million. This requirement is only applicable if there is a paint or surface coating.

So, if you have a solid wooden gate that is uncoated and unpainted it may not necessarily require that lead and paint testing. However, any sort of paint-coated pieces or coated metal would require testing under that lead paint federal requirement.

Slide 27

Does the mounting hardware included with my product need to meet total lead content requirements?

Slide 28

The answer is yes. All accessible components of children's products must meet the 100ppm limit on total lead content in 15 U.S.C. 1278a.

There are some materials that would be exempt in 16 CFR 1500.91. However, any part of that hardware that is potentially accessible for a child to touch or mouth would require testing for total lead content.

Slide 29

Next, I will talk about the basic physical and mechanical testing requirements for children's products, including small parts and sharp points and edges.

The small part requirement is in 16 CFR part 1501. This refers to small parts that would fit entirely into a small parts cylinder, which is specified in the regulation.

A small parts cylinder is made to approximate the airway of a child. It is about the same size as a roll of toilet paper tube, and any product that is intended for use by children under age 3 cannot have small parts, with limited exceptions.

However, gates and enclosures are not one of those exceptions.

Therefore, gates and enclosures would need to be tested for small parts. Any components that detaches from the product after the use and abuse testing can be considered small parts.

The sharp points and edges testing requirement is in 16 CFR 1500.48-49, and there are test methods to determine whether or not a sharp point or edge is present in the product.

Slide 30

Our next question is: “Does the mounting hardware included separately with my product need to meet the small parts requirements?” On this slide is also an example of what that mounting hardware might look like.

Slide 31

The answer is no. Testing shall be completed on the products installed according to the manufacturer's instructions. This means if the manufacturer's instructions say that all of those small parts, or all of those mounting hardware parts, are supposed to be affixed to the product and to the wall, that is where the product will be tested and how the product will be viewed.

However, installation hardware cannot become liberated during testing to create that small part.

Slide 32

Here is a list of some of the physical and mechanical testing that you will need to comply with for the engagement enclosures requirements:

- The latching/locking and hinge mechanism durability test
- Automatic closing system test
- locking mechanisms test
- release mechanism test
- tension test and torque test
- vertical strength test
- horizontal push-out test
- completely bound openings and bottom spacing
- partially bounded openings at the uppermost edge
- slat strength test

The details about what all of these tests entail are included in the text of ASTM F1004-19. I strongly encourage manufacturers of these products to read through this standard to make sure that you understand the variety of tests.

Slide 33

Now I am going to show you some pictures of some of these tests to give you an idea of the type of mechanical testing that products undergo at third-party lab.

The first picture is an example of the visual side pressure indicator. If your gate is a pressure-mounted gate, it must have that side pressure indicator.

As you can see in the picture on the left, this product is demonstrating insufficient pressure. This is shown by the red indicator in between those two pieces of the product.

Then, in the picture on the right, we have sufficient pressure. The indicator is no longer showing because there's sufficient pressure in the gate.

Slide 34

Next is an example of the vertical strength test.

You do not want a child to be able to compress the top of the gate and then make its way over that gate.

Therefore, the uppermost top rails, edges, or framing components of the gates or enclosures shall not fracture, disengage, fold, or have a deflection that reduced the lowest point of the uppermost surface to a dimension of less than 22 inches or 55.9 centimeters from the floor when tested.

In this picture, the top of the lowest point of that gate is less than 22 inches or 55.9 centimeters, so this gate would fail this test.

Slide 35

Here is an example of a partially bound openings test.

In these pictures there are several sides that could potentially entrap a child and there is an actual opening at the top.

We call this product partially bound, because it's bound on several sides but not all sides.

The picture on the right is an example of a couple of the test probes that would be used to determine if the product is compliant with that partially bound opening requirement.

Slide 36

Here we have a product with a completely bounded opening and bottom spacing. At the bottom of the gate the enclosure is completely bound by both the floor and the product itself. The test will make sure that certain probes cannot fit through that bottom spacing.

Slide 37

Here is an example of the horizontal push out test. This test is to ensure that the gate will not dislodge or open with a specified amount of pressure, as described in the test methods.

Slide 38

Now, I will talk about other performance requirements per ASTM F1004:

- Structural integrity: make sure your product does not have sharp edges, exposed coils, or any breakage of attachment systems
- No opportunity for scissoring, shearing, or pinching.
- Permanency of the labels and warning
- An adhesion test for warning labels that are applied directly to the surface of the product to make sure that a consumer cannot easily peel off warning labels or lose that information.
- A holes or slats requirement to make sure test fixtures should not fit through the product when it is in the manufacturer's recommend position. This is intended to make sure that small body parts, like fingers and toes, do not get stuck in products.

Slide 39

There are different requirements for gates and enclosures regarding toys.

For gates, there shall be no toys or accessories attached to or sold with a gate. The intent of the gate is to prevent a child from accessing an area. Therefore, you do not want to attach something to it that is going to make that gate more attractive to a child.

With enclosures, toys are allowed. However, they must meet all the requirements of the federal toy safety requirements, which incorporate ASTM F963-17. If you have questions about U.S. toy safety requirements, we have a variety of resources on our website.

Slide 40

Next question: "can I rely on in-house product safety testing on my gate and enclosure?"

Slide 41

The answer is no. All durable infant or toddler products must be tested at a third-party laboratory accepted by CPSC for testing children's products, even if you're a small-batch manufacturer.

In order to find a CPSC-accepted testing lab, visit our website, www.cpsc.gov/labsearch.

Please be aware that if you have changed the product design, your manufacturing process, or if you are sourcing your component parts from a different supplier, you must retest your product.

Additionally, if there is any change that you know or think could affect the product's ability to comply with these rules, you must retest the product.

For further details on testing requirements, please refer to the CPSC website.

Slide 42

The U.S. manufacturer or importer of any children's product, including gates and enclosures must prepare and have available to CPSC a Children's Product Certificate, often called a "CPC." The CPC certifies that the product is compliant with the applicable safety rules. A U.S. importer

may ask you to prepare a CPC based on testing that you have arranged, however, the legal responsibility remains with the importer.

Please visit our website at www.CPSC.gov/CPC for more information.

On this page, we have the seven questions that need to be answered on the CPC. You can also see here a sample CPC for a children's toy and for children's clothing.

Slide 43

Now we will review two recall examples.

The first example is a pressure-mounted gate that posed a fall hazard because of insufficient pressure to hold the gate in the intended position.

The low metal bar in this product could be considered a tripping hazard.

This is an example of a gate that was previously recalled before there was a regulated requirement for the closing mechanism.

Slide 44

Here is another example of an entrapment and strangulation hazard to a child because of the V-shaped opening along that top edge. This is a partially bound opening that had the potential to cause an injury. This is another example of a recall that was completed prior to the regulated requirement coming into force.

If you are producing a new product I recommend you search our recalls page. You view recalls by going to www.CPSC.gov/recalls.com and you can see issues that people have had in the past with recalls of products.

Slide 45

Thank you, and we hope you enjoyed this podcast. If you have any questions on the presentation, please do not hesitate to submit your questions in English or Chinese to the mailbox mentioned earlier: CPSCinChina@cpsc.gov. This mailbox is routinely monitored.

Slide 47-49

We also wish to remind viewers that CPSC has many technical documents and resources available in Chinese. At the conclusion of this presentation, we provide many links to resources viewers may find useful.

Slides 51

We encourage viewers to be sure to check out CPSC's Regulatory Robot, available in English, Chinese, and several other languages. The Regulatory Robot is an automated tool that can help identify safety requirements for many different types of products. Many companies have found this tool to be extremely helpful.

Slides 53

Please also see the following slides to view a variety of gates and enclosures specific resources.

Thank you for downloading this presentation.