

## Directions Governing Inspection of Wooden Board Commodities

Adopted and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economics Affairs, on January 4, 2013. Name amendment and promulgated by the Bureau of Standards, Metrology and Inspection, Ministry of Economics Affairs on September 23, 2016. (Originally named as Directions Governing Type-Approved Batch Inspection of Wooden Board Commodities)

### Chapter 1. General Principles

1. These Directions are enacted to govern the inspection of wooden board commodities.
2. The scope of Directions are applicable to wooden board commodities that require inspection, including:
  - a. Laminated veneer lumber category: laminated veneer lumber and structural laminated veneer lumber;
  - b. Plywood category: plywood, special plywood, structural plywood, plywood for concrete-form, scaffolding plywood, and plywood for pallet;
  - c. Wooden floor category: composite wood flooring, strip flooring, block flooring and parquet;
  - d. Glulam category: glulam for decorative use, fancy veneer overlaid glulam for decorative use, structural glulam, and fancy veneer overlaid structural glulam posts;
  - e. Medium-density fiberboard and Particleboard, with the exception of raw materials supplied for processing or assembly into furniture.
3. The terms used herein are defined as follows:
  - a. Short side: Refers to the short side of the cross-section of a glulam.
  - b. Long side: Refers to the long side of the cross-section of a glulam. In the case of square cross-section, the length shall refer to the thickness of the lamination.
  - c. Large dimension: The short side of the glulam is longer than 15 cm and the cross-section area is larger than 300 cm<sup>2</sup>.
  - d. Medium dimension: The short side of the glulam is longer than 7.5 cm and the long side of the glulam is longer than 15 cm.
  - e. Small dimension: The short side of the glulam is less than 7.5 cm, or the long side of the glulam is less than 15 cm.
  - f. Same type: Refers to commodities with the same applicable Chinese National Standards (CNS), adhesives, manufacturing factory and production country, and formaldehyde emission grade; For commodity containing fire retardants, the commodity shall also have the same fire retardant grade.
  - g. Main type:
    - i. Laminated veneer lumber and plywood categories: Refers to commodities of the same type with the greatest thickness (dimension of veneer lamination) and the most number of layers (number of veneer lamination and decorative layers). For commodities having the same thickness but different number of layers as the main type, if the difference in number of layers conforms to the following scopes, the commodity may be deemed as the main type.
      1. Less than four layers: 1 layer
      2. Five to twenty layers: 2 layers
      3. More than twenty one layers: 3 layers
    - ii. Wooden floor category, medium density fiberboard and particleboard: Refers to commodities of the same type with greatest thickness.
    - iii. Glulam category: Refers to the large dimensions of the same type. If there are no large dimensions, then the medium dimensions shall be the main type. If there are no medium dimensions, then the small dimensions shall be the main type.
  - h. Series type: Besides the main type, other commodities of the same type are deemed as

series type. Commodities of the same type and thickness, and a layer difference conforming to the aforementioned scope in Sub-Paragraph i of preceding Paragraph, shall be deemed as the same series type.

- i. Same specifications:
  - i. Laminated veneer lumber and plywood categories: Refers to commodities of the same type, thickness, and number of layers. If the difference in number of layers conforms to the aforementioned scope in Sub-Paragraph i of Paragraph g, the commodity shall be deemed as having the same specification.
  - ii. Wooden floors, medium density fiberboard and particleboard: Refers to commodities of the same type and same thickness.
  - iii. Glulam: Refers to commodities of the same type, same short side, and same long side.
- j. Special Specifications: Refers to custom-made glulam commodities with arch, cone, pyramid, or other shapes, and different cross-sections.
- k. Cross-section: Refers to vertical plane of glue line.

#### 4. Inspection Method

- a. Laminated veneer lumber category, plywood, special plywood, structural plywood, plywood for pallet, wooden floor category, glulam category, medium density fiberboard, and particleboard: Parallel implementation of type-approved batch inspection or registration of product certification 【 Type Test Module (Module II) and Complete Quality Control and Management Module (Module IV), Production Quality Management Module (Module V), or Factory Inspection Module (Module VII) 】
- b. Plywood for concrete-form and scaffolding plywood:
  - i. Before December 31, 2016: monitoring inspection
  - ii. Starting from January 1, 2017: Same as preceding Paragraph
- c. The conformity of the registration of product certification with the module of evaluation procedures stipulated in Paragraph a shall be implemented pursuant to Article 3 of the Regulations Governing Registration of Product Certification.

#### 5. Inspection Standards and Items

- a. Laminated veneer lumber category shall be subject to inspection tests for formaldehyde emission and labeling pursuant to CNS 11818 or CNS 14646.
- b. Plywood category:
  - i. Plywood, special plywood, structural plywood, and plywood for pallet shall be subject to inspection tests for formaldehyde emission and labeling pursuant to CNS 1349, CNS 8058, CNS 11671, and CNS 15583 respectively.
  - ii. Plywood for concrete-form and scaffolding plywood shall be subject to inspection labeling pursuant to CNS 8057 (Amended and promulgated on February 24, 2000) and CNS 11670 (amended and promulgated on January 25, 1999) prior to December 31, 2016. As of January 1, 2017, the commodities shall be subject to inspection tests for formaldehyde emission and labeling pursuant to CNS 8057 (Amended and promulgated on October 5, 2012) and CNS 11670 (amended and promulgated on October 2, 2014).
  - iii. Wooden floor category shall be subject to inspection tests for formaldehyde emission and labeling pursuant to CNS 2871, CNS 11341, or CNS 11342.
  - iv. Glulam category shall be subject to inspection tests for formaldehyde emission and labeling pursuant to CNS 11029, CNS 11030, CNS 11031, or CNS 11032.

- v. Medium-density fiberboard shall be subject to inspection tests for formaldehyde emission and labeling pursuant to CNS 9909 while particleboard shall be subject to inspection tests for formaldehyde emission and labeling pursuant to CNS 2215. Commodities containing fire retardants shall also be subject to a fire retardant test.
6. The labeling specifications for laminated veneer lumber category, plywood, special plywood, structural plywood, glulam category, medium-density fiberboard and particleboard are stipulated as follows:
- a. Prior to December 31, 2016:
    - i. Besides specifying the following items on the commodity, the obligatory inspection applicant should also specify all the items required by the Inspection Standard and the items stipulated in Article 11 of The Commodity Inspection Act on the external packaging or on the product.
      - 1. Commodity Inspection Mark: Drawings, “T”, or “R”, and designation code printed by the obligatory inspection applicant
      - 2. Grade of formaldehyde emission (F1, F2, or F3)
      - 3. Name, address or trademark of the manufacturer (or importer)
      - 4. Production date or batch number
    - ii. The obligatory inspection applicant should detail the production date or batch number of the aforementioned commodity on the inspection application when applying for type-approved batch inspection.
    - iii. For commodity products shipped in the original packaging used during production or processing directly to the downstream industries for usage or processing instead of market display or sales, the obligatory inspection applicant may attach an application form and apply to the Bureau of Standards, Metrology and Inspection (herein referred to as BSMI) or its subsidiary offices (herein referred to as inspection authorities) to print only the “production date or batch number” on the body of the commodity product. This provision is not applicable to the labeling requirements stipulated in the first Sub-Paragraph of current Article.
  - b. As of January 1, 2017: Besides the labeling requirements in the preceding Paragraph, the name of product and country of origin should also be printed on the product body.
7. The labeling specifications for plywood for concrete-form and scaffolding plywood are stipulated as follows:
- a. Prior to December 31, 2016:
    - i. The obligatory inspection applicant should specify the items required by the Inspection Standard and the items stipulated in Article 11 of The Commodity Inspection Act on the clearly visible areas of the product or on the external packaging. In addition, to enable consumers to have a clear understanding of the commodity information, the body of the commodity products should be labeled with the following items:
      - 1. Name of commodity: The commodity product should be labeled on the surface or on the bottom, sporting clear, discernible, and wear-resistant labels printed with “Plywood for concrete-form” or “Scaffolding Plywood”.

2. Commodity Inspection Mark: Drawings, “M” and designation code printed by the obligatory inspection applicant, where the designation code is the registration number of the monitoring inspection
  3. Name, address or trademark of the manufacturer (or importer)
  4. Production date or batch number
  - ii. For commodity products shipped in the original packaging used during production or processing directly to the downstream industries for usage or processing instead of market display or sales, the obligatory inspection applicant may apply to the inspection authorities to exempt the printing of “Name, address or trademark of the manufacturer (or importer)”.
  - b. As of January 1, 2017: Same as Paragraph b of preceding Article.
8. The labeling specifications for plywood for pallet shall be the same Paragraph b of Article 6.
9. The labeling specifications for wooden floor category are stipulated as follows:
- a. Prior to December 31, 2016: Besides labeling the items pursuant to inspection standards (CNS 2871, 11341, and 11342) on the smallest packaging or on the body of the commodity product during product display or sales, the obligatory inspection applicant shall label the name of the commodity product, name and address of the obligatory inspection applicant, and the Commodity Inspection Mark printed by the obligatory inspection applicant (comprised of drawings, “T”, or “R”, and designation code)
  - b. As of January 1, 2017: Besides the labeling requirements stipulated in preceding Paragraph, the country of origin shall also be labeled.

## Chapter 2. Regulations for Type Approved Batch Inspection

10. For commodity products adopting the type approved batch inspection, the obligatory inspection applicant shall first apply for the type test and type certification to obtain the product type certification. The obligatory inspection applicant shall apply for inspection before importing or shipping the products and the commodity products may only be displayed or sold in the local markets after passing the inspections.
11. The applicant of the type test shall prepare the type classification table of each wooden board commodity, three copies of the following technical documents and the sample according to the different main types (including series types) and apply to the BSMI, subsidiary offices of the BSMI (Formaldehyde emission test: excluding Tainan Branch; fire retardant test: excluding Hsinchu, Tainan and Hualien Branch), or a designated testing laboratories recognized authorized by the BSMI for the type test:
- a. Specification list 【model or code table, commodity structure (including cross-section diagram of structure), composite materials (including surface processing materials) and type of adhesive】
  - b. 4×6 inch commodity pictures in color (with a ruler showing the thickness or cross-section dimensions of the finished glulam product)
  - c. Overview of manufacturing process
  - d. Specimen of Chinese label

- e. Sample:
- i. Laminated veneer lumber category: At least two columns should be taken for the formaldehyde emission test of every main type and series type. 【Each column shall provide two sample pieces with surface areas of  $450 \text{ cm}^2$  (except for two cross-sections) from the portion no less than 5 cm away from the end portion along the length of each column while maintaining the size of the cross-section.】
  - ii. Plywood category: At least two sheets should be taken for the formaldehyde emission test of every main type and series type, cut in accordance with following specifications:
    1. Plywood for concrete-form: Each sheet should be cut as 150 mm (length)  $\times$  50 mm (width)  $\times$  10 pieces  $\times$  2 sets
    2. Other plywood, excluding plywood for concrete-form: Each sheet should be cut as rectangular samples of 150 mm (length)  $\times$  50 mm (width) and the minimum number of pieces where the total area of the cross-section and bottom surface exceeds  $1800 \text{ cm}^2 \times 2$  sets.
  - iii. Wooden floor category: At least two sheets should be taken for the formaldehyde emission test of every main type and series type. 【Each sheet should be taken from the central portion, and cut as 150 mm (length)  $\times$  50 mm (width)  $\times$  10 pieces  $\times$  2 sets.】 For samples with particularly small specifications that are unable to conform to the aforementioned cut dimensions, please contact the testing laboratory to discuss on exception processes.
  - iv. Medium-density fiberboard and particleboard: At least two sheets should be taken for the formaldehyde emission test of every main type and series type. 【Each sheet shall be adopted from the portion of the sample with total surface area of approximately  $1800 \text{ cm}^2 \times 2$  sets.】 For samples containing fire retardant, an additional three samples of dimensions 100 mm  $\times$  100 mm shall be taken.
  - v. Glulam category: At least two columns should be taken for the formaldehyde emission test of every main type and series type. 【Each column shall provide two sample pieces with surface areas of  $450 \text{ cm}^2$  (except for two cross-sections) from the portion no less than 5 cm away from the end portion along the length of each column while maintaining the size of the cross-section.】 If the cross-section dimension or length of the sample is larger than the test vessel, the sample should be cut into multiple sample pieces of the same shape (adjusting as required depending on the facilities of each testing laboratory). For special specifications that are unable to conform to the aforementioned cut dimensions, please contact the testing laboratory to discuss on exception processes.

## 12. Principles of the Type Test

- a. Laminated veneer lumber and plywood categories: The main type must be submitted for formaldehyde emission test and labeling inspections; the series type must be submitted for the formaldehyde emission test for the product with the smallest thickness and the least amount of layers; if there are more than five series types, an additional sample of median thickness must be submitted for the formaldehyde emission test.
- b. Wooden floor category: The main type must be submitted for formaldehyde emission test and labeling inspections; the series type must be submitted for the formaldehyde emission test for the product with the smallest thickness; if there are more than five series types, an additional sample of median thickness must be submitted for the formaldehyde emission test.

- c. Glulam category: The main type must be submitted for formaldehyde emission test and labeling inspections; the series type must be submitted for formaldehyde emission test for each applied dimension type.
- d. Medium density fiberboard and particleboard: The main type must be submitted for formaldehyde emission test and labeling inspections; the series type must be submitted for the formaldehyde emission test for the product with the smallest thickness; if there are more than five series types, an additional sample of median thickness must be submitted for the formaldehyde emission test. For samples containing fire retardant, an additional fire retardant test will be conducted in addition to the aforementioned principles.

### 13. Application Procedures for Type Approved

- a. After applying for type test and receiving the type test report in accordance with the two preceding articles, the applicant shall submit the application form, type test report and technical documents to the inspection authorities to apply for type certification, and obtain the Certificate of the Approval of Product.
- b. Prior to the application for type certification, the CNS Mark test report may be used as an alternative for the type test report within one year of its date of issuance. However, the CNS Mark test report may only be used as an alternative for the type test report of one main type or one series type.
- c. The reviewing period for the type approved is fourteen working days beginning from the date of receipt of application by the inspection authorities. (Waiting time for additional application information or samples not included.) In addition, sample inspections will be subject to an additional processing period of seven days beginning from the receipt of the samples.

### 14. The validity period for Certificate of the Approval of Product is three years, during which if there are any amendments to the scope of the commodity type certification, the following regulations shall be conducted:

- a. Laminated veneer lumber category, plywood category, wooden floor category, medium density fiberboard and particleboard:
  - i. For the inclusion of commodity products having a larger thickness than the main type or commodity products of same thickness as the main type but having a larger number of layers, the applicant shall apply to the inspection authority that issued the original inspection report for type inspection test, and apply to the inspection authority for certificate reissuance. The included commodity product will be amended as the main type and the main type registered in original type certificate will be amended as the series type.
  - ii. For the inclusion of series type commodity products (without affecting the original main type), the applicant shall apply to the inspection authority that issued the original inspection report for type inspection test, and apply to the inspection authority for certificate reissuance in accordance with the following regulations:
    - 1. For commodity products with thickness larger than the smallest thickness of the series type in the original certificate, the commodity product of median thickness shall be submitted for formaldehyde emission test.
    - 2. For commodity products with thickness smaller than the smallest thickness of the series type or commodity products of similar thickness as the series

type but having a smaller number of layers, the commodity product of the series type having the smallest thickness and the least number of layers shall be submitted for formaldehyde emission test. For commodity products containing fire retardant, an additional fire resistance test will be conducted.

- b. Glulam category:
  - i. For commodity products having a larger dimension than the main type, the applicant shall apply to the inspection authority that issued the original inspection report for type inspection test, and apply to the inspection authority for certificate reissuance. The included dimension type will be amended as the main type and the main type registered in original type certificate will be amended as the series type.
  - ii. For the inclusion of series type commodity products (without affecting the original main type), the applicant shall apply to the inspection authority that issued the original inspection report for type inspection test and apply to the inspection authority for certificate reissuance.

15. For the inspection of type-approved wooden board commodities, the inspection authorities should conduct the inspection in accordance with the following regulations:

- a. When applying for inspection, the obligatory inspection applicant should adopt the following as one batch of inspection:
  - i. Laminated veneer lumber category, plywood category, wooden floor category, and medium density fiberboard and particleboard: Commodity products of same specifications
  - ii. Glulam category: Same commodity item, same commodity model; if the batch contains commodity products of different cross-section dimensions or special specifications, a detailed list of classifications should be attached.
- b. For glulam products with special specifications, if the main or series type of the type certification may contain the smallest and largest dimensions, and the obtaining of samples will damage the original shape of product leading to inability to continue commodity usage, the obligatory inspection applicant may attach relevant documents, such as order or contract, to apply to the inspection authority for inspection by document review.
- c. For minor glulam commodities made for special purposes and commodity type specified in the type certification, and the obtaining of samples will damage the original shape of product leading to inability to continue commodity usage, the obligatory inspection applicant may attach relevant documents, such as inspection quantity, specifications, intended use, and purpose, and the credential approved by BSMI to apply for inspection by document review.
- d. When the obligatory inspection applicant applies for the inspection of wooden board commodities for the first time, the sample inspection is compulsory, but glulam commodities that conform to the two preceding Paragraphs are exempt from this requirement. For qualified products, the inspection authority may sample by a probability 5% of each batch of subsequently declared wooden board commodities for sample inspection. Document review is conducted for batches not sampled to simplify the inspection procedure.
- e. For disqualified wooden board commodities, the wooden board commodities of the same obligatory applicant shall pass quantity sample batch-by-batch inspections for thrice the volume and for five consecutive batches before returning to the simplified inspection procedure of 5% sample inspection per batch.

- f. The quantity taken for sample inspection is based in accordance with the appropriate inspection standards. However, when the quantity is insufficient to conduct at least two inspections, the principle is to obtain a sufficient quantity. If the quantity of commodities declared for inspection is more than two containers, at least two containers shall be opened for even sampling.
- g. In accordance with the quantity provisions of the preceding Paragraph, the inspection authority shall obtain and seal the samples, and hand the samples to the obligatory inspection applicant for custody for re-inspection purposes.
- h. Inspection items are the same as Article 5. Commodity products containing fire retardants shall undergo an additional fire retardant test, in which the test location shall be the same as for fire-retardant building materials.
- i. The inspection period for batch-by-batch inspection shall be seven working days after the obtaining of samples.
- j. Inspection departments:
  - i. Formaldehyde emission: BSMI, and its subsidiary offices (excluding Tainan Branch )
  - ii. Fire retardant: Keelung Branch, Taichung Branch, or Kaohsiung Branch, of the BSMI

16. If the inspection authority receives accusation reports or has doubts regarding the consistency of the inspection standards with respect to the commodity of an inspection application, the inspection authority may also conduct sampling tests for formaldehyde emission, verify the labeling, or perform the fire retardant test.

17. New inspection applications must be submitted within six months of the issuing of Unsatisfactory Inspection Notice and the completion of improvements.

18. For commodity products that obtained the type approved, the inspection authority may designate inspection officers to the obligatory party of the type certificate or manufacturing factory to conduct sample inspections, or assign inspection officers to conduct inspections during the manufacturing processes.

### Chapter 3. Regulations for Registration of Product Certification

19. For products that are registered for certification, the obligatory inspection applicant should obtain the product registration certificate before the import or shipping of the commodity, and ensure conformity with inspection regulations before the commodity may be placed for market display or sales.

### 20. Application Procedures for Registration of Product Certification

- a. The applicant shall apply for type test in accordance with Article 11. After obtaining the type test report, the applicant shall apply to the inspection authorities in accordance with



the application procedures for Registration of Product Certification and obtain the Product Registration Certificate.

- b. Prior to the application for Registration of Product Certification, the CNS Mark test report may be used as an alternative for the type test report within one year of its date of issuance. However, the CNS Mark test report may only be used as an alternative for the type test report of one main type or one series type.
- c. The reviewing period for the registration of product certification is fourteen working days beginning from the date of receipt of application by the inspection authorities. (Waiting time for additional application information or samples not included.) In addition, sample inspections will be subject to an additional processing period of seven days beginning from the receipt of the samples.

21. The validity period for product registration certificate is three years, during which if there are any amendments to the scope of product registration certificate, it shall be conducted in accordance with Paragraph a or Paragraph b of Article 14.