



UNIFIED NETWORKING INITIATION FOR THE MINATO "MORI & MIZU"

**Minato Model
Carbon Dioxide Fixation
Certification System**

www.uni4m.or.jp

Since October 2011, Minato City Office has operated the Minato Model Carbon Dioxide Fixation Certification System, which is aimed to promote the use of domestic lumbers for buildings. The purpose of this system is to contribute to the prevention of global warming by promoting an increase in the amount of CO₂ fixation in the city through the use of domestic lumbers for buildings constructed in the city, as well as an increase in CO₂ absorption volume through the promotion of domestic forest improvement.

Outline of the system

Minato City Office gives building owners certification outlining the amount of CO₂ fixation corresponding to the amount of domestic lumbers used to construct their buildings. This system is based on the Agreement on the Promotion of Domestic Lumber Use Including Forest Thinnings, which ensures reforestation after logging. The system recommends owners to use lumbers produced under this agreement to ensure the legitimacy of lumbers being used and the sustainability of forests managed by individual municipal governments that have concluded promotion of domestic lumber use agreements with Minato City.

Buildings covered by the system

Those who wish to construct buildings with a total floor space of 5,000 m² or greater in the city are required to submit a Domestic Lumber Use Plan to the city office before construction. Even in the case of the construction of buildings with a total floor space of less than 5,000 m², owners can be granted certification by voluntarily submitting the Plan.

Standard amount of lumber usage

Those who wish to construct buildings with a total floor space of 5,000 m² or greater in the city have to use 0.001 m³ or more of domestic lumbers for a floor area of 1 m².

- Standard level (certificate with ★ issued): 0.001 m³ for a floor area of 1 m²
- Upgrade level (1) (certificate with ★★ issued): 0.005 m³ for a floor area of 1 m²
- Upgrade level (2) (certificate with ★★★ issued): 0.010 m³ for a floor area of 1 m²

Lumbers covered by CO₂ fixation amount certification

Lumbers that are covered by CO₂ fixation amount certification are lumbers and lumber products produced in areas under the jurisdiction of municipal governments that have concluded promotion of domestic lumber use agreements with Minato City. Despite their best efforts, however, when owners (including constructors who actually procure lumbers) cannot procure the appropriate lumbers produced under such agreements, domestic legitimate lumbers* are also covered by CO₂ fixation amount certification.

*Legitimate lumbers refer to those that have proven to be legitimate, based on the “guidelines to prove the legitimacy and durability of lumbers and lumber products” formulated by the Forestry Agency

Usage and usage patterns of lumbers and lumber products covered by CO₂ fixation amount certification

- (1) Usage: structural materials, interior and exterior decorating materials, fixture members, exterior structural materials and furniture
- (2) Usage patterns: solid wood, laminated wood, plywood, products mixed with fiberboards, etc. (lumber products that consist of various materials)

However, mixed products that do not contain lumbers produced under promotion of domestic lumber use agreements or legitimate domestic lumbers as raw materials are excluded.

* Please refer to the website for further information on products made with lumbers produced under promotion of domestic lumber use agreements and on the definition and certification of mixed products under the system.

Implementation guidelines for the Minato Model Carbon Dioxide Fixation Certification System

(Purpose)

Article 1 The purpose of these guidelines is to ensure that Minato City Office (hereinafter referred to as the “city office”) implements a system to certify CO₂ fixation amounts (hereinafter referred to as the “Minato Model CO₂ Fixation Certification System”) corresponding to the amount of domestic lumbers used for buildings in the city, thereby promoting domestic lumber use and contributing to the increase in CO₂ absorption volume through the promotion of domestic forest improvement.

(Definition)

Article 2 In these guidelines, the meanings of the terms listed in the following items shall be as defined respectively in those items.

- (1) Lumbers produced under promotion of domestic lumber use agreements: Refers to domestic lumbers produced in areas under the jurisdiction of municipal governments that have concluded an Agreement on the Promotion of Domestic Lumber Use Including Forest Thinnings with the city office.
- (2) Legitimate lumbers: Refers to domestic lumbers that have proven to be legitimate, based on the “guidelines to prove the legitimacy and durability of lumbers and lumber products” (formulated by the Forestry Agency).
- (3) Construction: Refers to that as prescribed in Article 2, Item 13 of the Building Standards Act (Act No. 201 of 1950).
- (4) Owners: Refers to those who engage in construction in the city.
- (5) Specific owners: Refers to those who construct buildings with a total floor space of 5,000 m² or greater in the city.
- (6) Structural materials: Refers to parts to support a building (foundations, posts, beams, girders, boards, etc.).
- (7) Interior and exterior decorating materials: Refers to parts that constitute the interior and exterior decorations of a building (inner and outer walls, floors, ceilings, roofs, furniture, etc. including base sheets and veneer).
- (8) Exterior structural materials: Refers to parts that constitute the outer surface of a building (excluding planting).
- (9) CO₂ fixation amount certificate: Refers to a certificate issued by the city mayor to certify a building’s CO₂ fixation amount under the Minato Model CO₂ fixation certification system.

(Duties of owners)

Article 3 Owners, when constructing buildings in the city, shall endeavor to use lumbers produced under promotion of domestic lumber use agreements.

(Duties of specific owners)

Article 4 Specific owners, when constructing buildings in the city, shall endeavor to use lumbers produced under promotion of domestic lumber use agreements that exceed the amount listed in Appended Table 1. However, when the city mayor finds that there is a compelling reason, they may use legitimate lumbers in lieu of lumbers produced under promotion of domestic lumber use agreements.

(Submission of a domestic lumber use plan)

Article 5 Specific owners, when wishing to construct buildings in the city, shall submit a domestic lumber use plan to the city mayor in advance.

- (2) Specific owners, when wishing to construct buildings in the city, may submit a domestic lumber use plan to the city mayor pursuant to the provision of Article 5 (1)

(Submission of a completion notice of domestic lumber use)

Article 6 Specific owners or owners who have submitted a domestic lumber use plan to the city mayor pursuant to the provision of Item 2 in the preceding article (hereinafter referred to as “owners who have voluntarily submitted documents”) shall submit a completion notice of domestic lumber use (Form No. 2) after construction in the city.

(Calculation of the amount of domestic lumber usage)

Article 7 The city mayor, when having received a completion notice of domestic lumber use pursuant to the provision of the preceding article, shall calculate the amount used of lumbers produced under promotion of domestic lumber use agreements or legitimate lumbers in the relevant construction.

(2) The calculation of the amount used of lumbers produced under promotion of domestic lumber use agreements or legitimate lumbers pursuant to the provision of the preceding paragraph shall be conducted for structural materials, interior and exterior decorating materials, exterior structural materials and others materials that the city mayor finds necessary.

(Calculation of the CO₂ fixation amount)

Article 8 The city mayor, when having calculated the amount used of lumbers produced under promotion of domestic lumber use agreements or legitimate lumbers pursuant to the provision of the preceding article, shall convert the amount used to a CO₂ fixation amount.

(2) The calculation of the CO₂ fixation amount pursuant to the provision of the preceding paragraph shall be based on the standards prescribed in Appended Table 2.

(Issuance of a CO₂ fixation amount certificate)

Article 9 The city mayor, when having calculated the CO₂ fixation amount pursuant to the provision of the preceding article, shall issue a CO₂ fixation amount certificate to specific owners or owners who have voluntarily submitted documents.

(Publication)

Article 10 The city mayor may publicize the outline of domestic lumber use plans submitted pursuant to the provision of Article 5 and completion notices of domestic lumber use submitted pursuant to the provision of Article 6.

(Admonition, etc.)

Article 11 With the aim of achieving the goal of these guidelines, the city mayor may admonish specific owners to take necessary actions

(2) The city mayor, when specific owners fail to follow admonitions without due reason, may publicize the contents of the admonitions and the names of specific owners.

(Special provision)

Article 12 The provisions in these guidelines may not apply to cases where the city mayor finds there is a compelling reason for them not to be applied.

(Commission)

Article 13 In addition to that provided for in these guidelines, other necessary matters shall be prescribed by the city mayor.

Supplementary provision

These guidelines are in effect as of October 1, 2011.

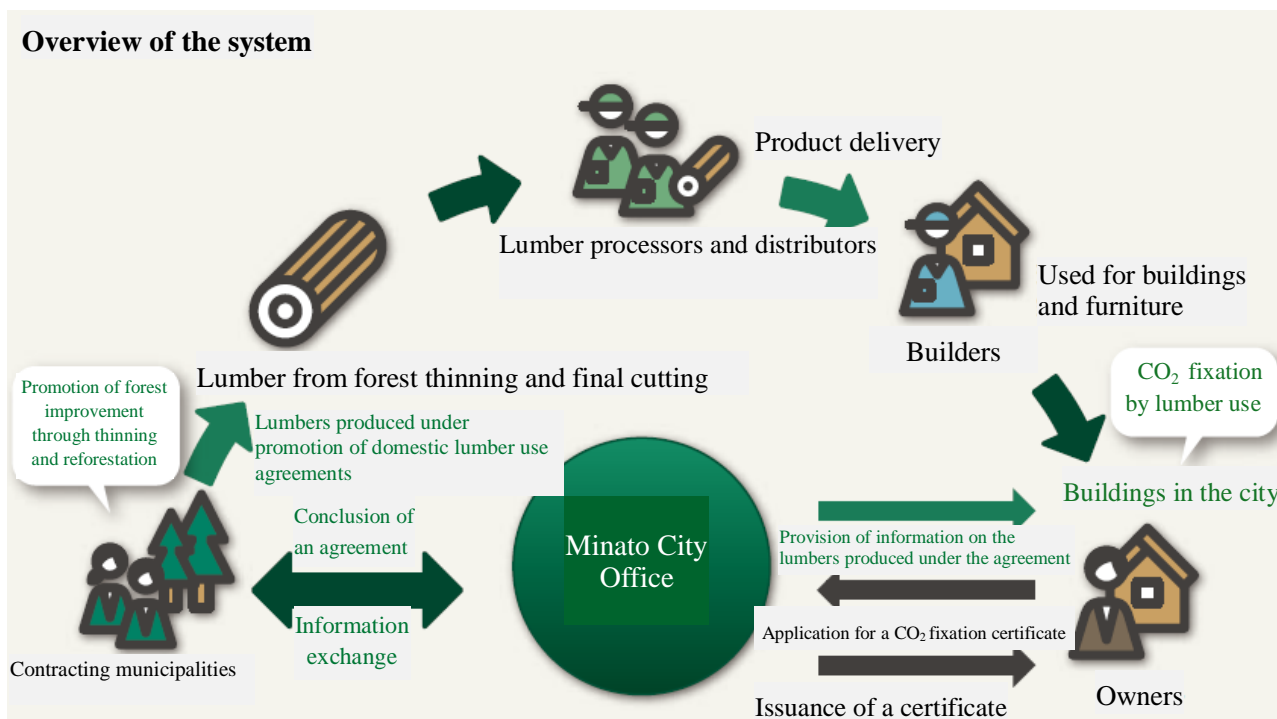
Appended Table 1 (Related to Article 4)

Amount used of lumbers produced under promotion of domestic lumber use agreements: 0.001 m³ for a floor area of 1 m²

Appended Table 2 (Related to Article 8)

Calculation standard for the CO₂ fixation amount: CO₂ fixation amount (t – CO₂) = domestic lumber usage (m³) × bulk density (t/m³) × carbon content rate (%) × CO₂ conversion factor (44/12)

The bulk density and carbon content rate for each tree species of domestic lumbers shall be the values listed in the Report on Supplementary Information concerning LULUCF Activities under the Provisions of Article 3-3 and 3-4 of the Kyoto Protocol, which the Japanese government is supposed to submit to the office of the United Nations Framework Convention on Climate Change.



Procedural flow

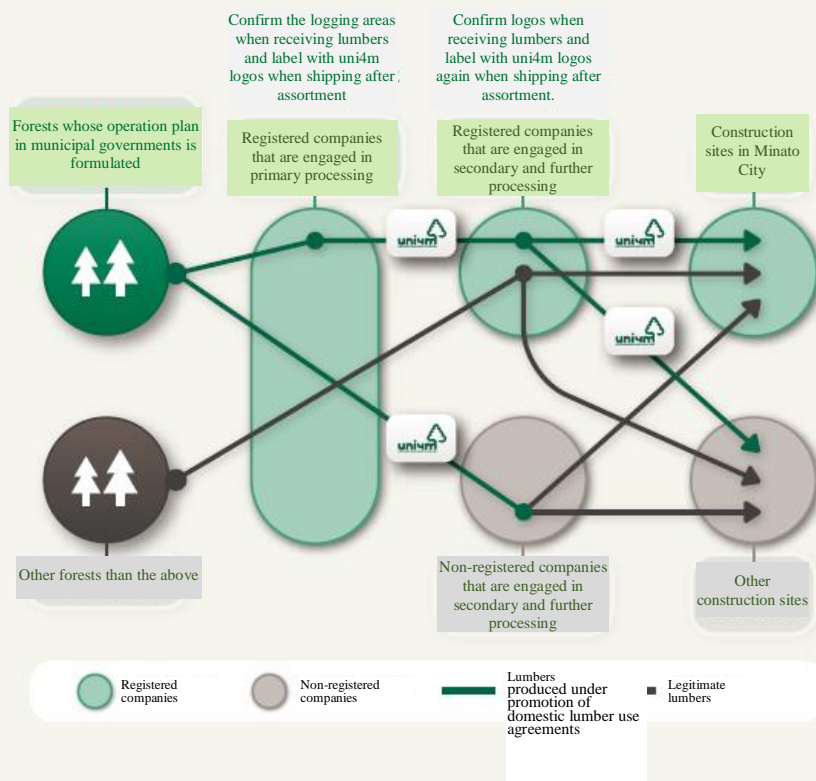
Please be sure to make preliminary arrangements at the building planning stage.

Stage	Procedures	Documents to be submitted
Planning	Preliminary arrangements The city office provides information on products made with lumbers produced under promotion of domestic lumber use agreements. (Samples of such products are on available.) ▽	<ul style="list-style-type: none"> Outline and architectural drawings of the building (voluntary)
Before construction	Submission of a domestic lumber use plan ▽ Examination ▽	<ul style="list-style-type: none"> Domestic lumber use plan Record of the planned usage of domestic lumber Copy of an application for building certification, etc.
During construction	Interim examination On-site examination of the parts that are hidden at the completion of construction ▽	—
After the completion of construction	Submission of a completion notice of domestic lumber use ▽ Documentary examination/On-site examination ▽ Issuance of a CO₂ fixation amount certificate	<ul style="list-style-type: none"> Completion notice of domestic lumber use Record of the amount of domestic lumber usage Report on the calculation of the CO₂ fixation amount Copies of delivery slips of the products made with lumbers produced under promotion of domestic lumber use agreements, etc.

*See the website for further information on documents to be submitted. Documents with prescribed forms can be downloaded from the website.

How to identify lumbers produced under promotion of domestic lumber use agreements

Under this system, the uni4m logo (shown to the right) is used to identify lumbers produced under promotion of domestic lumber use agreements. Business operators handling such lumbers (registered operators) have to place the uni4m logo on the lumbers when shipping. (Labeling for lumber products is voluntary.) Owners identify the relevant products as lumbers produced under promotion of domestic lumber use agreements using the uni4m logo put on delivery slips and can then calculate the usage and CO₂ fixation amount of the lumbers (excluding other domestic legitimate lumbers).



■uni4m logo



■Example of a delivery slip

Logo displayed when lumbers produced under promotion of domestic lumber use agreements are included

株式会社〇〇建設 Delivery slip

〒100-8311 東京都港区芝公園1-5-20 TEL:03-3579-2111

みなと木工株式会社 (Red Seal)

2000年〇月〇日

Name of products/Standard	Volume	Sum	Remarks column
フローリングユニット 国産スギ国産材 (〇×〇×〇mm)			UN4M Minato
フローリングユニット 国産スギ国産材 (〇×〇×〇mm)			UN4M Minato
フローリングユニット 国産スギ国産材 (〇×〇×〇mm)			
フローリングユニット 国産スギ国産材 (〇×〇×〇mm)			

In the case of lumbers produced under promotion of domestic lumber use agreements, uni4m and the logging areas are put in the remarks column.

*Please be sure to keep the delivery slips of lumbers and lumber products since they are necessary when submitting a completion notice of domestic lumber use

Issuance of a CO₂ fixation amount certificate

The CO₂ fixation amount is calculated based on the amount of lumbers and tree species used. In this system, it is calculated using the following calculation formula, based on the bulk density and carbon content rate listed in the Report on Supplementary Information concerning LULUCF Activities under the Provisions of Article 3-3 and 3-4 of the Kyoto Protocol. It is as follows.

$$\text{CO}_2 \text{ fixation amount (t-CO}_2\text{)} = \text{Target lumber usage volume} \times \text{Bulk density (t/m}^3\text{)} \times \text{Carbon content rate (0.5)} \times \text{CO}_2 \text{ conversion factor (44/12)}$$

*Please refer to the website for further information on bulk density by tree species

Certificate



The city office issues a certificate stating the amount used of lumbers produced under promotion of domestic lumber use agreements and the corresponding CO₂ fixation amount. Please keep it in the public eye.

Using the logo in advertising

Owners who have submitted a domestic lumber use plan or a completion notice of domestic lumber use to the ward office can publicize their products using the system's exclusive logos. When wishing to use these logos, please submit an application form to gain approval.

The logos that are available differ depending on the status of building construction and the amount of relevant lumber being used. Please refer to the "Guidelines for Logo Usage" for further information about application procedures and logo types. The guidelines and application forms can be downloaded from the system's website.

Minato model [Minato City]
CO₂ fixation certification system
To be certified ☆☆



Minato model [Minato City]
CO₂ fixation certification system
Certified ☆☆☆
[100 t-CO₂]



System office and website

At the inception of this system, Minato City established an office for the Minato Model CO₂ Fixation Certification System. The office performs various duties, such as the screening of submitted documents, the provision of information on registered owners who are handling lumbers produced under promotion of domestic lumber use agreements and lumber products, and the provision of consultation services on appropriate lumber uses. Please feel free to contact us.

Detailed information on registered owners and lumbers produced under promotion of domestic lumber use agreements can be seen at the system's website.

www.uni4m.or.jp

Inquiries regarding the system

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CO₂ Fixation Certification System Office
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