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PUBLIC PROPOSAL FORM

FOR PUBLIC PROPOSALS ON THE INTERNATIONAL CODES
2004/2005 CODE DEVELOPMENT CYCLE

PLEASE SEE REVERSE FOR INSTRUCTIONS ON SUBMITTING PUBLIC PROPOSALS. PROPOSALS MUST COMPLY WITH THESE INSTRUCTIONS.

CLOSING DATE: All Proposals Must Be Received by August 20, 2004.

The 2004/2005 Code Development Hearings are tentatively scheduled for February 21 – March 2, 2005 in Cincinnati, OH.

- 1) Indicate the format in which you would like to receive your Public Proposals Monograph (PPM), Report of the Hearing (ROH) and Final Action Agenda (FAA):

Paper * CD *Download from ICC Website

(*Note: A paper copy will not be sent to you if you have chosen the CD or Download format.)

- 2) PLEASE TYPE OR PRINT CLEARLY: FORMS WILL BE RETURNED if they contain unreadable information.

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- 3) *Signature: _____ Signature on File (see over)

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- 4) Cost Impact: Indicate if this Proposal: will will not increase the cost of construction.

- 5) Indicate appropriate International Code(s) associated with this Public Proposal – Please use Acronym:

**IFGC,
IMC, IRC**

If you have also submitted a separate coordination change to another I-Code, please indicate the code: (See back of this form for list of names and acronyms for the International Codes).

- 6) Revision to: Section **IFGC 703, IMC 304.4, IRC M1307.4** Table _____ Figure _____

- 7) PROPOSAL Please check appropriate box:

Revise as follows: Add new text as follows Delete and substitute as follows: Delete without Substitution(s):

Show the proposed NEW, REVISED or DELETED TEXT in legislative format: ~~Line through text to be deleted.~~ Underline text to be added.

PROPOSAL *Continued* (Attach additional sheets as necessary)

- 8) SUPPORTING INFORMATION (State purpose and reason, and provide substantiation to support proposed change):

Without revision, the current wording has the effect of limiting the number of hydrogen-fueled vehicles stored in such occupancies to three. Rather than restricting the number of vehicles stored, it is the intent that the refueling area be limited both in size (i.e., 850 square feet) and number of vehicles (i.e., three) being refueled. Additionally it was felt that improvements to the sentence structure of the Sections (IFGC 703.1.1.1, IMC 304.4.1.1, IRC M1307.4.1.1) which describe the location and size of the openings will improve interpretation and enforcement. No other technical revisions have been made.

SUPPORTING INFORMATION *Continued* (Attach additional sheets as necessary)

PLEASE USE SEPARATE FORM FOR EACH PROPOSAL

7) PROPOSAL

IFGC

Section 703.1

1. Revise as follows:

703.1 Hydrogen-generating and refueling operations. Ventilation shall be required in accordance with Section 703.1.1, 703.1.2 or 703.1.3 in public garages, private garages, repair garages, automotive service stations and parking garages which contain hydrogen-generating appliances or refueling systems. ~~Such spaces shall be used for the storage of not more than three hydrogen-fueled passenger motor vehicles and have a floor area not exceeding 850 square feet (79 m²). The maximum rated output capacity of hydrogen-generating appliances shall not exceed 4 standard cubic feet per minute (ft³/min) of hydrogen for each 250 square feet (23.2 m²) of floor area in such spaces. Such equipment and appliances shall not be installed in Group H occupancies except where the occupancy is specifically designed for hydrogen use, or in control areas where open use, handling or dispensing of combustible, flammable or explosive materials occurs.~~ For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

703.1.1 Natural ventilation. Indoor locations intended for hydrogen-generating or refueling operations shall be limited to a maximum floor area of 850 square feet (79 square meters), and communicate with the outdoors in accordance with Sections 703.1.1.1 through 703.1.1.2. The maximum rated output capacity of hydrogen generating appliances shall not exceed 4 SCFM of hydrogen for each 250 square feet (23.2 square meters) of floor area in such spaces. The minimum cross-sectional dimension of air openings shall be 3 inches (76 mm). Where ducts are used, they shall be of the same cross-sectional area as the free area of the openings to which they connect. In such locations, equipment and appliances having an ignition source shall be located such that the source of ignition is not ~~less than~~within 12 inches (305 mm) ~~below of~~ the ceiling.

703.1.1.1 Two openings. Two permanent openings shall be provided within the garage. The upper opening shall be located entirely within 12 inches (305 mm) of the ceiling of the garage. ~~The lower opening shall be and one~~ located entirely within 12 inches (305 mm) of the floor of the garage. Both openings shall be provided in the same exterior wall. The openings shall communicate directly with the outdoors. ~~Each opening shall directly communicate with the outdoors horizontally,~~ and have a minimum free area of 1/2 square foot per 1,000 cubic feet (1 m²/610 m³) of garage volume.

703.1.1.2 Louvers and grilles. In calculating the free area required by Section 703.1.1.1, the required size of openings shall be based on the net free area of each opening. If the free area through a design of louver or grille is known, it shall be used in calculating the size opening required to provide the free area specified. If the design and free area are not known, it shall be assumed that wood louvers will have 25-percent free area and metal louvers and grilles will have 75-percent free area. Louvers and grilles shall be fixed in the open position.

703.1.2 Mechanical ventilation. Indoor locations intended for hydrogen-generating or refueling operations shall be ventilated in accordance with Section 502.16 of the International Mechanical Code. In such locations, equipment and appliances having an ignition source shall be located such that the source of ignition is below the mechanical ventilation outlet(s).

703.1.3 Specially engineered installations. As an alternative to the provisions of Section 703.1.1 and 703.1.2, the necessary supply of air for ventilation and dilution of flammable gases shall be provided by an approved engineered system.

IMC

Section 304.4

2. Revise as follows:

304.4 Hydrogen generating and refueling operations. Ventilation shall be required in accordance with Section 304.4.1, 304.4.2 or 304.4.3 in public garages, private garages, repair garages, automotive motor-fuel-dispensing facilities and parking garages which contain hydrogen generating appliances or refueling systems. ~~Such spaces shall be used for the storage of not more than three hydrogen-fueled passenger motor vehicles and have a floor area not exceeding 850 square feet (79 square meters). The maximum rated output capacity of hydrogen-generating appliances shall not exceed 4 SCFM of hydrogen for each 250 square feet (23.2 square meters) of floor area in such spaces. Such equipment and appliances shall not be installed in Group H occupancies except where the occupancy is specifically designed for hydrogen use, or in control areas where open use, handling or dispensing of combustible, flammable or explosive materials occurs.~~ For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

304.4.1 Natural ventilation. Indoor locations intended for hydrogen generating or refueling operations shall be limited to a maximum floor area of 850 square feet (79 square meters), and communicate with the outdoors in accordance with Sections 304.4.1.1 and 304.4.1.2. The maximum rated output capacity of hydrogen generating appliances shall not exceed 4 SCFM of hydrogen for each 250 square feet (23.2 square meters) of floor area in such spaces. The minimum dimension of air openings shall be not less than 3 inches (76 mm). Where ducts are used, they shall be of the same cross-sectional area as the free area of the openings to which they connect. In such locations, equipment and appliances having an ignition source shall be located such that the source of ignition is not ~~less than~~within 12 inches ~~(228 mm)~~(305 mm) ~~below of~~ the ceiling.

304.4.1.1 Two openings. Two permanent openings shall be provided within the garage. The upper opening ~~one~~ shall be located entirely within 12 inches (305 mm) of the ceiling of the garage. ~~and one~~The lower opening shall be located entirely within 12 inches (305 mm) of the floor of the garage. Both openings shall be provided in the same exterior wall. The openings shall communicate directly, ~~or by ducts,~~ with the outdoors. ~~Each opening shall directly communicate with the outdoors horizontally,~~ and have a minimum free area of ½ square foot per 1,000 cubic feet (1 m²/610 m³)(1644 mm²/m³) of garage volume.

304.4.1.2 Louvers and grilles. In calculating free area required by Section 304.4.1, the required size of openings shall be based on the net free area of each opening. If the free area through a design of louver or grille is known, it shall be used in calculating the size opening required to provide the free area specified. If the design and free area are not known, it shall be assumed that wood louvers will have 25 percent free area and metal louvers and grilles will have 75 percent free area. Louvers and grilles shall be fixed in the open position.

304.4.2 Mechanical ventilation. Indoor locations intended for hydrogen generating or refueling operations shall be ventilated in accordance with Section 502.16. In such locations, equipment and appliances having an ignition source shall be located such that the source of ignition is below the mechanical ventilation outlet(s).

304.4.3 Specially engineered installations. As an alternative to the provisions of Sections 304.4.1 and 304.4.2 the necessary supply of air for ventilation and dilution of flammable gases shall be provided by an approved engineered system.

IRC

Section 1307.4

3. Revise as follows:

M1307.4 Hydrogen generating and refueling operations. Ventilation shall be required in accordance with Section 1307.4.1, 1307.4.2 or 1307.4.3 in private garages which contain hydrogen generating appliances or refueling systems. Such spaces shall be used for the storage of not more than three hydrogen-fueled passenger motor vehicles and have a floor area not exceeding 850 square feet (79 m²). ~~The maximum rated output capacity of hydrogen generating appliances shall not exceed 4 SCFM of hydrogen for each 250 square feet (23.2 m²) of floor area in such spaces.~~ For the purpose of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.

M1307.4.1 Natural ventilation. Indoor locations intended for hydrogen generating or refueling operations shall be limited to a maximum floor area of 850 square feet (79 square meters), and communicate with the outdoors in accordance with Sections 1307.4.1.1 through 1307.4.1.2. The maximum rated output capacity of hydrogen generating appliances shall not exceed 4 SCFM of hydrogen for each 250 square feet (23.2 square meters) of floor area in such spaces. The minimum dimension of air openings shall be not less than 3 inches (76 mm). Where ducts are used, they shall be of the same cross-sectional area as the free area of the openings to which they connect. In such locations, equipment and appliances having an ignition source shall be located such that the source of ignition is not ~~less than~~within 12 inches ~~(228 mm)~~(305 mm) ~~below of~~ the ceiling.

M1307.4.1.1 Two openings.

Two permanent openings shall be provided within the garage. The upper opening shall be ~~one~~ located entirely within 12 inches (305 mm) of the ceiling of the garage. The lower opening shall be ~~and one~~ located entirely within 12 inches (305 mm) of the floor of the garage. Both openings shall be provided in the same exterior wall. The openings shall communicate directly, ~~or by ducts,~~ with the outdoors. ~~Each opening shall directly communicate with the outdoors horizontally,~~ and have a minimum free area of 1/2 square foot per 1,000 cubic feet (1 m²/610 m³) of garage volume.

M1307.4.1.2 Louvers and grilles. In calculating free area required by Section 1307.4.1, the required size of openings shall be based on the net free area of each opening. If the free area through a design of louver or grille is known, it shall be used in calculating the size opening required to provide the free area specified. If the design and free area are not known, it shall be assumed that wood louvers will have a 25-percent free area and metal louvers and grilles will have a 75-percent free area. Louvers and grilles shall be fixed in the open position.

M1307.4.2 Mechanical ventilation. Indoor locations intended for hydrogen generating or refueling operations shall be ventilated in accordance with Section 502.16 of the International Mechanical Code. In such locations, equipment and appliances having an

[ignition source shall be located such that the source of ignition is below the mechanical ventilation outlet\(s\).](#)

M1307.4.3 Specially engineered installations. As an alternative to the provisions of Sections 1307.4.1 and 1307.4.2, the necessary supply of air for, ventilation and dilution of flammable gases shall be provided by an approved engineered system.