

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

CONSTRUCTION SAFETY STANDARDS

(By authority conferred on the director of the department of licensing and regulatory affairs by sections 19 and 21 of 1974 PA 154, MCL 408.1019 and 408.1021; and Executive Reorganization Order Nos. 1996-2, 2003-1, 2008-4, and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030)

PART 22. SIGNALS, SIGNS, TAGS, AND BARRICADES

R 408.42201 Scope.

Rule 2201. This part pertains to the design, placement, relocation, covering, removal, use, and maintenance of signals, traffic control devices, accident prevention signs, tags, and barricades for construction operations.

History: 1979 AC; 2001 AACCS.

R 408.42209 Adopted and referenced standards.

Rule 2209. (1) American National Standards Institute (ANSI) International Safety Equipment Association (ISEA) standard 107 "High-Visibility Safety Apparel and Headwear," 2004 edition, is adopted by reference in these rules. This standard is available from Techstreet, 3916 Ranchero Drive, Ann Arbor, Michigan, 48108, USA, telephone number: 1-800-699-9277 or via the internet at website: [www.techstreet.com](http://www.techstreet.com); at a cost as of the time of adoption of these rules of \$36.00.

(2) The "Manual on Uniform Traffic Control Devices, Part 6: Temporary Traffic Control," 2011 Michigan/2009 Federal Edition is adopted by reference in these rules and is available at no cost from the Michigan Department of Transportation via the Internet at website: [www.michigan.gov/mdot](http://www.michigan.gov/mdot). The entire 2011 Michigan Manual on Uniform Traffic Control Devices (MMUTCD) may be purchased from the Michigan Department of Transportation, Cashiers Office, P.O. Box 30648, Lansing, Michigan 48909-8148; (517) 322-1676; at a cost of \$145.00 as of the time of adoption of these rules.

(3) The standards adopted in subrules (1) and (2) of this rule are also available for inspection at the Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143.

(4) Copies of the standards adopted in subrules (1) and (2) of this rule may be obtained from the publisher or may also be obtained from the Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143, at the cost stated in subrules (1) and (2) of this rule, plus \$20 for shipping and handling.

(5) The following Michigan occupational safety and health standards are referenced in these rules. Up to 5 copies of these standards may be obtained at no charge from the Michigan Department of Licensing and Regulatory Affairs, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143 or via the internet at website: [www.michigan.gov/mioshastandards](http://www.michigan.gov/mioshastandards). For quantities greater than 5, the cost, as of the time of adoption of these rules, is 4 cents per page.

(a) Construction Safety Standard Part 1 “General Rules,” R 408.40101 to R 408.40134.

(b) Construction Safety Standard Part 6 “Personal Protective Equipment,” R 408.40601 to R 408.40641.

(c) Construction Safety Standard Part 10 “Lifting and Digging Equipment,” R 408.41001a to R 408.41099a.

(d) Construction Safety Standard Part 13 “Mobile Equipment,” R 408.41301.

(e) Construction Safety Standard Part 27 “Blasting and Use of Explosives,” R 408.42701 to R 408.42799.

(f) Construction Safety Standard Part 30 “Telecommunications,” R 408.43001 to R 408.43006.

(g) Construction Safety Standard Part 45 “Fall Protection,” R 408.44501 and R 408.44502.

History: 2006 AACCS; 2013 MR 8, Eff. April 29, 2013.

R 408.42211 Definitions; A to C.

Rule 2211. (1) "Accident prevention sign" means a sign used to warn of a hazard or to provide safety instructions or directions.

(2) "Accident prevention tag" means a tag which is used to warn of an existing or immediate hazard and which is temporarily attached to a part of equipment or a structure.

(3) "Barricade" means a readily visible obstruction used to direct the passage of employees or vehicles.

(4) "Barrier" means a device that is designed to prevent penetration from a way of travel to areas behind the barrier to minimize injury to employees who perform construction operations.

(5) "Caution sign or tag" means a sign or tag used to warn of a potential hazard or to warn against an unsafe practice.

History: 1979 AC; 1995 AACCS; 2001 AACCS.

R 408.42212 Definitions; D.

Rule 2212. (1) "Danger sign or tag" means a sign or tag used to signal an immediate hazard.

(2) "Directional sign" means a sign having an arrow to point out a direction.

(3) "Do not operate tag" means a tag to warn of a potential hazard if the equipment is operated.

(4) "Do not start tag" means a tag used to tag out a starting mechanism which would cause a hazard if started.

History: 1979 AC.

R 408.42213 Definitions; E to T.

Rule 2213. (1) "Exit sign" means a sign used to designate a point of discharge from a room or building.

(2) "Handhold" means an affixed device or designated place where a person riding on a moving vehicle or on equipment to perform work can stabilize his or her position by gripping with his or her free hand or hands.

(3) "Out of order tag" means a tag used to indicate a machine is malfunctioning.

(4) "Safety instruction sign" means a sign used for general instruction or suggestion relative to safety.

(5) "Sign" means a board, sheet, poster, or placard displayed to convey information or direction either temporarily or permanently.

(6) "Signal" means a specific use of hands or a visual or audible device, such as a flashing light or horn, to warn of a possible or existing hazard.

(7) "Tag" means a piece of material, usually paper, metal, or plastic, attached to a piece of equipment or structure for the purpose of identification, instruction, or classification.

(8) "Traffic control devices" means all signs, signals, markings, and devices placed or erected for the purpose of regulating, warning, and guiding vehicular traffic and for providing employee protection in a work zone.

(9) "Traffic regulator" means a person who has been trained, properly attired, and equipped to regulate traffic flow to provide employee protection in a work zone.

(10) "Work zone" means a portion of a street or highway that meets any of the following:

(a) Is between a "work zone begins" sign and an "end road work" sign.

(b) For construction, maintenance, or utility work activities conducted by a work crew and more than 1 moving vehicle, is between a "begin work convoy" sign and an "end work convoy" sign.

(c) For construction, maintenance, surveying, or utility work activities conducted by a work crew and 1 moving or stationary vehicle exhibiting a rotating beacon or strobe light, is between either of the following points:

(i) A point that is 150 feet behind the rear of the vehicle or that is the point from which the beacon or strobe light is first visible on the street or highway behind the vehicle, whichever is closer to the vehicle.

(ii) A point that is 150 feet in front of the front of the vehicle or that is the point from which the beacon or strobe light is first visible on the street or highway in front of the vehicle, whichever is closer to the vehicle.

History: 1979 AC; 1995 AACS; 2001 AACS; 2013 MR 8, Eff. April 29, 2013.

R 408.42221 Duties of employer.

Rule 2221. (1) An employer shall provide, install, and maintain signals, signs, barricades, and tags, as prescribed by this part, where an employee might be, or would likely be, injured if not alerted to the hazard.

(2) An employer shall provide training appropriate to the work assignment for each employee engaged in activities covered by this part. The following are examples of the training that may be required:

(a) Recognition of hazards, such as, but not limited to, possible masonry wall collapse areas, crane swing areas, floor opening covers, or traffic control hazards.

(b) Traffic regulator training.

(c) Proper placement and removal of signs, signals, tags, and barricades.

(d) Training in how to perform work in proximity to traffic to minimize vulnerability.

History: 1979 AC; 1995 AACS; 2001 AACS.

R 408.42222 Rescinded.

History: 1979 AC; 1995 AACS; 2001 AACS.

R 408.42223 Traffic control.

Rule 2223. (1) Traffic control devices shall be installed and maintained as prescribed in Part 6 of the 2011 MMUTCD, which is adopted by reference in R 408.42209.

(2) An employer shall ensure that all operations have routine inspections of traffic control elements for acceptable levels of operation. When traffic exposures are such that signs, signals, or barricades do not provide the necessary protection on, or adjacent to, a highway or street, traffic regulators or other appropriate traffic controls shall be provided. Modification of traffic controls, such as additional signs or devices, or a change in work operations, shall be determined by a qualified person who is responsible for the project traffic control.

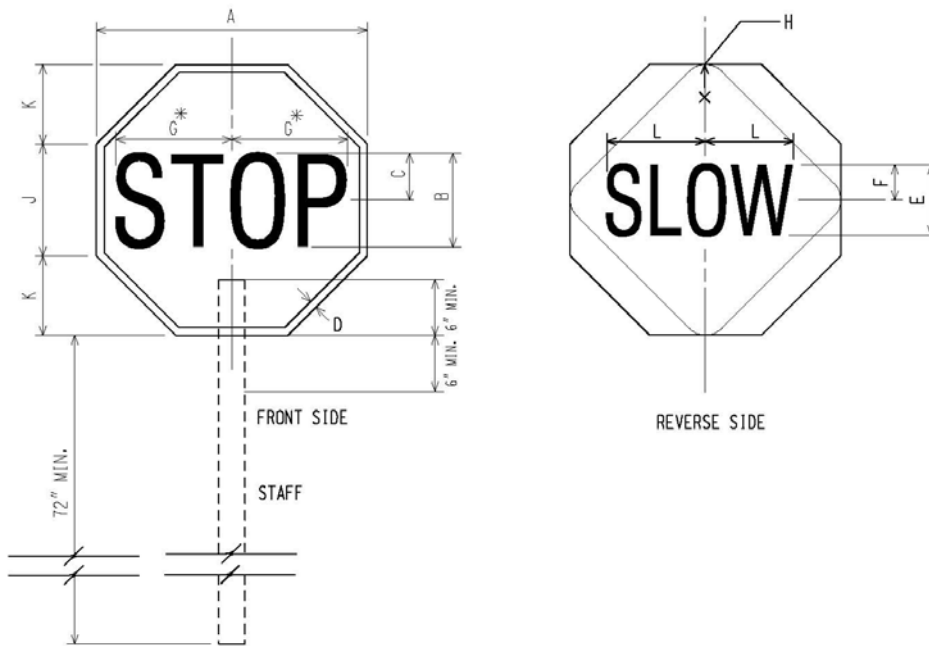
(3) Signaling directions by traffic regulators shall conform to the provisions of Part 6 of the 2011 MMUTCD, which is adopted by reference in R 408.42209.

(4) A hand-held paddle sign shall have 2 faces and it shall be attached to a staff of suitable design that will allow the entire unit to be held and controlled by 1 traffic regulator. The bottom of the sign shall be a minimum of 6 feet above the roadway surface. The sign shall be fastened to the staff so that no part of the legend is obscured. The portion of the staff within the sign face shall match the sign colors. The sign shall not be less than 18 by 18 inches and the letters shall have a minimum height of 6 inches. All letters and spacing between letters shall be as prescribed in Part 6 of the 2011 MMUTCD, which is adopted by reference in R 408.42209. The legend shall be optically centered horizontally on the sign. One side of the sign shall display a "STOP" face and the other side shall display the message "SLOW," except that if it is necessary for 1 traffic regulator to stop 2 directions of traffic at the same time, then a "STOP" face shall be used on each side of the sign. The "STOP" face shall have a red background with white letters and border. The "SLOW" face shall have an orange background with black letters and

border. The shape of the sign shall be octagonal and the portions of the sign other than the diamond-shaped "SLOW" face shall be black. When the sign paddle is used during hours of darkness, the red and white of the "STOP" face and the orange of the "SLOW" face shall be reflectorized. Sheet metal or other light semi-rigid material may be used for mounting the "STOP" and "SLOW" faces.

(5) If signaling by a traffic regulator is necessary on construction operations that are not within a public right-of-way, then a hand-held paddle sign as specified in subrule (4) of this rule shall be used.

(6) The paddle sign shall be as follows:



R1-1a

\* SPACING REDUCED 40%

SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
MINIMUM	18	6 C	3	.5	6 B	3	7.75	1.5	7.5	5.25	6.25
SPECIAL	24	8 C	4	.62	8 B	3.5	10	1.5	9.87	7.06	8.25

Note: "Special" sign dimensions are recommended for single traffic regulator operations.

(7) In periods of darkness, appropriate lighting shall be used to illuminate the traffic regulator and the traffic regulator station. The lighting shall be as is required in Construction Safety Standard Part 1 General Rules, R 408.40133, as referenced in R 408.42209. Appropriate lighting means lighting that illuminates the traffic regulator so that he or she is visible to oncoming traffic and does not impair either the traffic regulator's or motorists' visibility due to blinding or shadowing.

(8) An employer shall provide, and a traffic regulator shall wear, high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107, "High-Visibility Safety Apparel and Headwear," 2004 edition, (see Section 1A.11),

which is adopted by reference in R 408.42209, or equivalent revisions, and labeled as meeting the ANSI 107-2004 standard performance for Class 2 or 3 risk exposure.

(9) An employer shall require that the garment is inspected before each use for all of the following:

- (a) Wear.
- (b) Damage.
- (c) Fading.
- (d) Reflectivity.
- (e) Other deterioration.

Defective garments shall be reported to the employer and the employer shall either repair or replace the garment.

(10) A traffic regulator shall also wear head, eye, and foot protection as prescribed in Construction Safety Standard Part 6 Personal Protective Equipment, as referenced in R 408.42209.

History: 1979 AC; 1982 AACS; 1995 AACS; 2001 AACS; 2006 AACS; 2013 MR 8, Eff. April 29, 2013.

R 408.42224 Barricades for construction operations on other than public right-of-way.

Rule 2224. (1) A barricade that has a high point of not less than 36 inches (900 millimeters) shall be provided to direct vehicular traffic to protect an employee performing construction operations.

(2) A barricade shall be provided to obstruct or direct an employee from a hazardous area of a construction operation not otherwise affected by another standard.

(3) If an employee is working during a period of darkness, then a barricade shall be made visible by ambient illumination or by attached lighting.

History: 1979 AC; 2001 AACS.

R 408.42225 Placement, removal, relocation, and use of traffic control devices from a moving vehicle; handholds.

Rule 2225. (1) Construction and maintenance operations that require placement, relocation, or removal of pavement markings, or traffic control devices such as drums, barricades, cones, or signs, shall provide protection to an employee by any of the following methods:

(a) Use of a seat and a seatbelt that shall be worn.

(b) A standard guardrail system as prescribed in Construction Safety Standard Part 45 Fall Protection, R 408.44501, as referenced in R 408.42209, which adopts C.F.R. §1926.502 et seq. by reference.

(c) A guardrail as described in subdivision (b) of this subrule may be modified by removing a section of the guardrail at the point of operation to facilitate the handling of traffic control devices, such as barrels, cones, or pavement markers. A hand hold shall be

provided. This rule shall apply only to the placement, removal, relocation, and use of traffic control devices from a moving vehicle within the work zone.

(d) When placing or removing traffic control devices from a lower work platform, any combination of top rails, mid rails, side rails, seats, toe boards, or other combination of equivalent safeguards provided to the employee shall be used. A handhold shall be provided.

(e) Use of a positioning fall protection system that prevents the employee from falling from the vehicle. A handhold shall be provided.

(f) Use of other means that will provide equivalent fall protection for an employee may be used. Such a system shall be performance oriented and shall be designed so that it does not create a greater hazard to the employee.

(2) A handhold shall be oriented and a size to promote gripping by wrapping fingers around not less than 270 degrees (3 sides) of the device or place designated. The handhold shall be capable of withstanding not less than 200 pounds of force in any direction and be free from rough edges, slippery surfaces, or hazardous projections. The handhold shall be in place and identified as such before employees are permitted to perform their assigned tasks while riding on moving vehicles.

History: 2001 AACS; 2006 AACS; 2013 MR 8, Eff. April 29, 2013.

#### R 408.42229 Signs generally.

Rule 2229. (1) A sign and its fastening device shall be free of sharp edges, burrs, splinters, or other sharp projections that could create a hazard.

(2) If conditions warrant the use of a sign size that is not specified in tables 2 to 5, then the ratio of the height of the identifying panel, such as "DANGER" or "CAUTION", to the width of the sign shall be maintained as prescribed in the tables.

(3) Signs shall be removed or covered when the hazard addressed by the sign no longer exists.

History: 1995 AACS; 2001 AACS.

#### R 408.42230 Letter style and size.

Rule 2230. (1) A letter shall be block style and upper case for the top panel and upper or upper and lower case for the bottom panel. Letters and numbers shall be legible.

(2) Letter size shall be determined by the length of the message and the maximum visibility and readability. Table 2 shall be used as a guide for the minimum letter height at a safe viewing distance.

(a) The spacing of letters and words shall not reduce legibility.

(b) The height of a letter that is more than 5 inches (125 millimeters) high shall be increased by an additional 1 inch (25 millimeters) for each 35 feet (10.5 meters) of viewing distance.

(3) Table 2 reads as follows:

MINIMUM HEIGHT OF LETTERS	VIEWING DISTANCE
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Inches	Millimeters	Feet	Meters
5	<b>125</b>	201 - 250	<b>60.3 - 75</b>
4 1/2	<b>113</b>	151 - 200	<b>45.3 - 60</b>
4	<b>100</b>	121 - 150	<b>36.3 - 45</b>
3 1/2	<b>88</b>	106 - 120	<b>31.8 - 36</b>
3	<b>75</b>	91 - 105	<b>27.3 - 31.5</b>
2 1/2	<b>63</b>	76 - 90	<b>22.8 - 27</b>
2	<b>50</b>	61 - 75	<b>18.3 - 22.5</b>
1 1/2	<b>38</b>	41 - 60	<b>12.3 - 18</b>
1	<b>25</b>	31 - 40	<b>9.3 - 12</b>
3/4	<b>19</b>	21 - 30	<b>6.3 - 9</b>
1/2	<b>13</b>	10 - 20	<b>3 - 6</b>
1/4	<b>6</b>	Less than 10	<b>3</b>

History: 1995 AACS; 2001 AACS.

R 408.42231 Accident prevention signs.

Rule 2231. An accident prevention sign shall be in compliance with all of the following provisions:

- (a) Be placed to alert and inform in time to avoid a hazard or to take appropriate action.
- (b) Be placed and maintained so as to be legible, without distraction, and so that the sign does not create a hazard in itself.
- (c) Be placed so that the sign will not be obscured.
- (d) Be removed or covered when the hazard is removed.

History: 1979 AC; 1995 AACS.

R 408.42233 Danger sign.

Rule 2233. (1) A danger sign to alert employees shall be used where an immediate hazard exists. The sign shall be removed when the hazard no longer exists.

(2) The proportions for a danger sign shall be not less than those prescribed in table 3 and the format of figure 1 shall be followed.

(3) A danger sign shall have the signal word "danger" in white within a red oval outlined in white on a black rectangular background in the upper panel. The lower panel where additional wording may be used shall be black or red letters on a white background as shown in figure 1.

(4) An employee shall be instructed that a danger sign indicates immediate danger and that special precautions are necessary.



TABLE 3 STANDARD PROPORTIONS FOR DANGER SIGNS

SIGN SIZE		BLACK RECTANGULAR PANEL		RED OVAL		WORD DANGER		MINIMUM SPACE AVAILABLE FOR SIGN WORDING	
		HORIZONTAL PATTERN							
Inches	Millimeter	Inches	Millimeter	Inches	Millimeter	Inches	Millimeter	Inches	Millimeter
7 x 10	175 X 250	3 1/4 x 9 3/8	81 X 234	2 7/8 x 8 1/2	72 X 213	1 7/16	36	2 3/4 x 9 3/8	69 X 234
10 x 14	250 X 350	4 5/8 x 13 3/8	116 X 334	4 1/8 x 1 7/8	103 X 297	2 1/16	52	4 1/4 x 13 3/8	106 X 334
14 x 20	350 X 500	6 1/2 x 19 3/8	163 X 484	5 3/4 x 17	144 X 425	2 7/8	72	6 1/4 x 19 3/8	156 X 484
20 x 28	500 X 700	9 1/4 x 27 3/8	231 X 684	8 1/4 x 23 7/8	206 X 597	4 1/8	103	9 1/2 x 27 3/8	238 X 584
		UPRIGHT PATTERN							
10 x 7	250 X 175	2 3/8 x 6 3/8	59 X 159	2 1/8 x 5 7/8	53 X 147	1 1/16	27	6 3/8 x 6 3/8	159 X 159
14 x 10	350 X 250	3 1/4 x 9 3/8	81 X 234	2 7/8 x 8 1/2	72 X 213	1 7/16	36	9 1/2 x 9 3/8	238 X 234
20 x 14	500 X 350	4 5/8 x 13 3/8	116 X 334	4 1/8 x 11 7/8	103 X 297	2 1/16	52	14 x 13 3/8	350 X 334
28 x 20	700 X 500	6 1/2 x 19 3/8	163 X 484	5 3/4 x 17	144 X 425	2 7/8	72	20 1/4 x 19 3/8	506 X 484

History: 1979 AC; 2001 AACS.

R 408.42234 Caution sign.

Rule 2234. (1) A caution sign shall be used to warn of a potential hazard or to caution against an unsafe practice.

(2) The proportions for a caution sign shall be not less than those prescribed in table 4 and the format of figure 2 shall be followed.

(3) A caution sign shall have the signal word "caution" in yellow on a black background in the upper panel. The lower panel where additional wording may be used shall be black letters on a yellow background.

(4) An employee shall be instructed that a caution sign indicates a possible hazard and that proper precautions shall be taken.

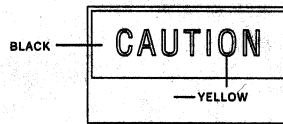
TABLE 4  
STANDARD PROPORTIONS FOR CAUTION SIGNS

SIGN SIZE		BLACK RECTANGULAR PANEL		WORD "CAUTION" HEIGHT OF LETTER		MINIMUM SPACE AVAILABLE FOR SIGN WORDING BELOW PANEL	
HORIZONTAL PATTERN							
Inches	Millimeter	Inches	Millimeter	Inches	Millimeter	Inches	Millimeter
7 x 10	175 X 250	2 1/4 x 9 3/8	56 X 234	1 5/8	41	3 1/4 x 9 3/8	81 X 234
10 x 14	250 X 350	3 1/4 x 13 3/8	81 X 3 3/4	2 1/4	56	5 1/2 x 13 3/8	138 X 334
14 x 20	350 X 500	3 3/4 x 19 3/8	94 X 484	2 3/4	69	9 x 19 3/8	225 X 484
20 x 28	500 X 700	4 1/4 x 27 3/8	106 X 684	4 1/4	106	14 1/2 x 27 3/8	363 X 684
UPRIGHT PATTERN							
10 x 7	250 X 175	1 5/8 x 6 3/8	41 X 159	1 1/8	28	7 x 6 3/8	175 X 159
14 x 10	350 X 250	2 1/4 x 9 3/8	56 X 234	1 5/8	41	10 1/2 x 6 3/8	263 X 159
20 x 14	500 X 350	3 1/4 x 13 3/8	81 X 334	2 1/4	56	15 1/2 x 13 3/8	388 X 334
28 x 20	700 X 500	3 3/4 x 19 3/8	94 X 484	2 3/4	69	24 x 19 3/8	600 X 484

FIGURE 1  
DANGER SIGN



FIGURE 2  
CAUTION SIGN



History: 1979 AC; 2001 AACS.

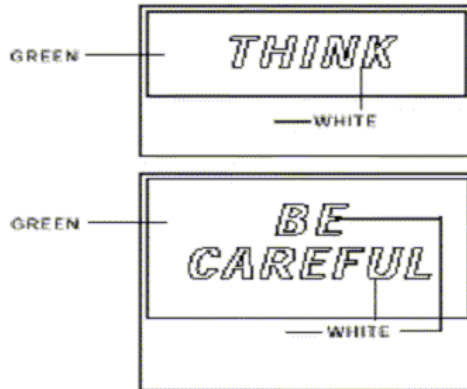
R 408.42235 Safety instruction sign.

Rule 2235. (1) A safety instruction sign shall be used for a general instruction or suggestion relative to safety measures.

(2) The proportions for a safety instruction sign shall be not less than those prescribed in table 5 and the format of figure 3 shall be followed.

(3) A safety instruction sign shall have the signal word in white on a green background in the upper panel. The lower panel where additional wording may be used shall be black letters on a white background.

FIGURE 3  
SAFETY INSTRUCTION SIGNS



(Note: the words "Think" and "Be Careful", given here, are only illustrations. Other wording may be used.)

TABLE 5  
STANDARD PROPORTIONS FOR SAFETY INSTRUCTION SIGNS

Sign Size		Green Rectangular Panel		Word "THINK" Height of Letter		Minimum Space Available for Sign Wording Below Panel			
Inches	Millimeters	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters		
7 x 10	175 x 250	2 3/4 x 9 3/8	69 x 234	1 3/8	34	3 1/2 x 9 3/8	88 x 234		
10 x 14	250 x 350	3 1/4 x 13 3/8	81 x 334	2 1/4	56	5 1/2 x 13 3/8	138 x 334		
14 x 20	350 x 500	3 3/4 x 19 3/8	94 x 484	2 3/4	69	9 x 19 3/8	225 x 484		
20 x 28	500 x 700	4 1/4 x 27 3/8	106 x 684	3 1/4	81	14 1/2 x 27 3/8	363 x 684		
Sign Size		Green Panel		Word "BE" Height of Letters		Word "CAREFUL" Height of Letters		Minimum Space Available for Sign Wording Below Panel	
Inches	Milli- meters	Inches	Milli- meters	Inches	Milli- meters	Inches	Milli- meters	Inches	Milli- meters
7 x 10	175 x 250	3 3/8 x 9 3/8	84 x 234	1 3/4	42	1 3/16	30	2 1/2 x 9 3/8	63 x 234
10 x 14	250 x 350	4 3/4 x 13 3/8	119 x 334	1 3/4	42	2 3/16	55	4 x 13 3/8	100 x 334
14 x 20	350 x 500	6 3/4 x 19 3/8	169 x 484	2 1/2	63	3 1/8	78	6 x 19 3/8	150 x 484
20 x 28	500 x 700	9 1/2 x 27 3/8	238 x 684	3 1/2	88	4 3/8	109	9 1/4 x 27 3/8	231 x 684

History: 1979 AC; 2001 AACS; 2006 AACS.

R 408.42236 Exit sign.

Rule 2236. An exit sign, when required, shall be lettered in legible red letters, not less than 6 inches (150 millimeters) high, on a white background, and the principal stroke of the letters shall not be less than 3/4 (19 millimeters) of an inch wide.

History: 1979 AC; 2001 AACS.

R 408.42237 Directional signs.

Rule 2237. (1) A directional arrow, other than a traffic control sign, used on a danger, caution, or safety instructional sign shall be black.

(2) A safety related directional sign shall have a white arrow on a black upper panel with the lower panel white and any letters in black.

(3) A directional sign shall use proportions prescribed in table 6

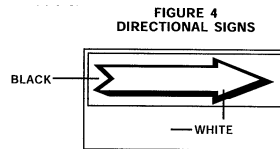


TABLE 6  
STANDARD PROPORTIONS FOR SAFETY DIRECTIONAL SIGNS

SIGN SIZE		BLACK RECTANGULAR PANEL		OVER-ALL LENGTH		MAXIMUM SPACE FOR SIGN WORDING BELOW PANEL	
Inches	Millimeters	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters
6 1/2 x 14	163 X 350	3 1/4 x 13 3/8	81 X 334	12 3/8	309	2 1/4 x 13 3/8	56 X 334
9 x 20	225 X 500	4 1/2 x 19 3/8	113 X 484	18 5/8	466	2 3/8 x 19 3/8	59 X 484
12 x 28	300 X 700	6 x 27 3/8	150 X 684	28 3/8	709	4 3/4 x 27 3/8	119 X 684
15 x 36	375 X 900	7 1/2 x 35 3/8	188 X 884	34 5/8	866	5 1/2 x 35 3/8	138 X 884
ARROW HEAD HEIGHT WIDTH		ARROW SHAFT HEIGHT		ARROW TAIL HEIGHT WIDTH			
Inches	Millimeters	Inches	Millimeters	Inches	Millimeters		
2 3/4 x 3	69 X 75	1 1/8	28	2 3/8 x 3 1/4	59 X 81		
3 3/4 x 4 1/8	94 X 103	1 5/8	41	3 1/4 x 4 1/2	81 X 113		
5 1/8 x 5 3/8	128 X 134	2 1/8	53	4 3/8 x 6	109 X 150		
6 3/8 x 6 7/8	159 X 172	2 3/8	59	5 1/2 x 7 1/2	138 X 188		

History: 1979 AC; 2001 AACS.

R 408.42238 Signs for blasting and use of explosives.

Rule 2238. Where blasting and the use of explosives takes place, signs shall be as prescribed in Construction Safety Standard Part 27 Blasting and Use of Explosives, as referenced in R 408.42209.

History: 1995 AACS; 2001 AACS; 2006 AACS; 2013 MR 8, Eff. April 29, 2013.

R 408.42241 Accident prevention tags generally.

Rule 2241. (1) An appropriate accident prevention tag shall be used as a temporary means of warning an employee of an existing hazard, such as defective tools or equipment. A tag shall not be used in place of an accident prevention sign or considered a complete warning method.

(2) A tag shall be affixed by string, wire, or adhesive.

(3) A tag shall be large enough to attract attention to the hazard but not less than 2 3/8 (59 millimeters) by 4 3/4 (119 millimeters) inches.

(4) The signal word shall be in bold type.

History: 1979 AC; 2001 AACS.

R 408.42242 Accident prevention tags; types; use and specifications.

Rule 2242. (1) A "Do Not Start" tag shall be attached to the starting mechanism of equipment that would cause a hazardous condition if activated. The background color shall be white with black lettering on a red square. (See figure 5.)

(2) A "Danger" tag shall be used where an immediate hazard or probability of injury exists. The background color shall be white with white letters on a red oval within a black square. (See figure 6.)

(3) A "Caution" tag shall be used to warn of a potential hazard or to caution against an unsafe practice. The background color shall be yellow with yellow letters on a black rectangle. (See figure 7.)

(4) An "Out of Order" tag shall be used only for the specific purpose of indicating equipment or machinery is out of order and its use might create a hazard. The background shall be white with white letters on a black square. (See figure 8.)

(5) A "Do Not Operate" tag shall be used to warn of potential hazard if use of the equipment would create a hazard. The background color shall be white with black lettering on a red square. (See figure 9.)

(6) An accident prevention tag shall be removed when the reason for use has been eliminated.

\*\*\*\* INSERT MISSING TABLE OR CHART - SEE ORIGINAL MANUSCRIPT  
\*\*\*\*

#### Danger Signs--

Danger--Keep Off, Electric Current.

Danger--No Smoking, Matches, or Open Lights.

Danger--Men Working Above.

Danger--Not Room Enough Here to Clear Men on Cars.

Danger--Keep Away.

Danger--Men in Boiler.

Danger--Insufficient Clearance.

Danger--2,300 Volts.

Danger--Keep Out.

Danger--Crane Overhead.

Danger--Keep Off.

#### Caution Signs--

Caution--Do Not Operate, Men Working on Repairs.

Caution--Hands Off Switch, Men Working on Line.

Caution--Working on Machines, Do Not Start.

Caution--Goggles Must Be Worn When Operating This Machine.

Caution--This Door Must Be Kept Closed.

Caution--Electric Trucks, Go Slow.

Caution--This Space Must Be Kept Clear at All Times.

Caution--Stop Machinery to Clean, Oil, or Repair.



Caution--Keep Aisles Clear.

Caution--Operators of This Machine Shall Wear Snug Fitting Clothing--No

Gloves.

Caution--Close Clearance.

Caution--Watch Your Step.

Caution--Electric Fence.

Safety Instruction Signs--

Report All Injuries to the First-Aid Room at Once.

Walk--Don't Run.

Report All Injuries No Matter How Slight.

Think, If Safe Go Ahead.

Make Your Work Place Safe Before Starting the Job.

Report All Unsafe Conditions to Your Foreman.

Help Keep This Plant Safe and Clean.

Directional Signs--

This Way Out (below arrow panel).

This Way (inside arrow) Out (below arrow panel).

Fire Exit (below arrow panel).

Fire (inside arrow) Extinguisher (below arrow panel).

To the (inside arrow) Fire Escape (below arrow panel).

To the (inside arrow) First Aid (below arrow panel).

Manway (below arrow panel).

This Way to (inside arrow) First Aid Room (below arrow panel).

Informational Signs--

No Trespassing Under Penalty of the Law.

This Elevator is for Freight Only, Not for Passengers.

No Admittance Except to Employees on Duty.

No Admittance.

No Admittance, Apply at Office.

No Trespassing.

Men.

Women.

For Employees Only.

Office.

History: 1979 AC.

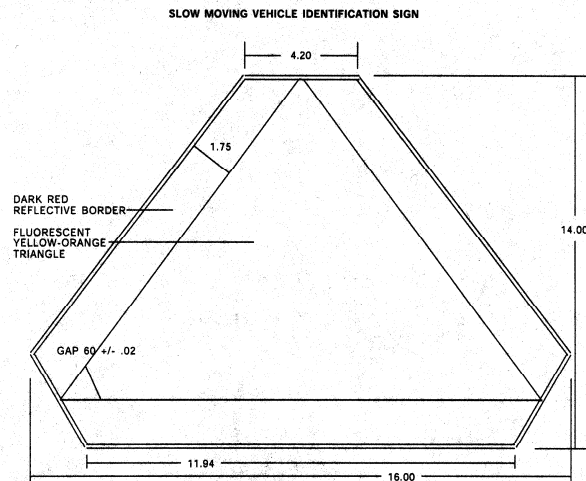
R 408.42243 Signs for slow-moving vehicles.

Rule 2243. (1) A sign as prescribed in this rule shall be attached to the rear of any vehicle that, by design, moves at 25 miles per hour or less on any public, private, or temporary road.

(2) The sign shall be entirely visible in daylight and at night from a distance of not less than 600 feet (180 meters).

(3) The sign shall be mounted point up and shall be placed centrally at the rear of the vehicle, unobscured, and at 3 feet (.9 meters) to 5 feet (1.5 meters) above the ground measured from the lower edge of the sign. The sign shall be securely attached to the vehicle.

### SLOW-MOVING VEHICLE IDENTIFICATION SIGN



(Note: Dimensions are in decimal inches.)

History: 1995 AACS; 2001 AACS.