

ANSI/ASAE EP576.2 OCT2012  
Lighting And Marking Of Animal-Drawn Equipment



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## **ANSI/ASAE EP576.2 OCT2012**

Revision approved December 2012 as an American National Standard

# **Lighting and Marking Of Animal-Drawn Equipment**

*Developed by the ASAE Lighting and Marking Committee; approved by the Power and Machinery Division Standards Committee; adopted by ASAE August 2001. Prior to publication in the 49th Edition of the Standards Book the standard was withdrawn to resolve comments brought forward to the developing committee. Standard revised and approved July 2008; approved by ANSI July 2008; revision approved October 2012; revision approved by ANSI December 2012.*

**Keywords:** Animal-drawn vehicle, Horse drawn vehicle, Lighting, Marking, Pony cart, Safety, Slow-moving vehicle (SMV)

## **1 Purpose and Scope**

**1.1** This recommended practice establishes a unique identification system for slow-moving animal-drawn vehicles on public roadways or highways.

**1.2** The identification system shall be used only on animal-drawn vehicles.

**1.3** It is intended that this identification system be used to complement existing laws, rules and regulations in individual states, provinces, and municipalities.

**1.4** It is recognized that this recommended practice can be a cultural or religious issue and is not intended to devalue or replace those values. It is intended to provide options to those who would like to add or enhance lighting and marking of their animal-powered vehicles in the form of a voluntary consensus standard.

## **2 Normative References**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies unless noted. For undated references, the latest approved edition of the referenced document (including any amendments) applies.

ASAE S276, Slow Moving Vehicle Identification Emblem (SMV Emblem)

ASAE S279, Lighting and Marking of Agricultural Equipment on Highways

ANSI/ASABE S608, Headlamps for Agricultural Equipment

SAE J594, Reflex Reflectors

SAE J585, Tail Lamps (Rear Position Lamps) for Use on Motor Vehicles Less Than 2032 mm in Overall Width

SAE J974, Flashing Warning Lamp for Agricultural Equipment SAE J537 SEP 2000, Storage Batteries

SAE J537, Storage Batteries

### 3 Definitions

**3.1 Highway:** The entire width between the boundary lines of every way publicly maintained, when any part thereof is open to the use of the public for purposes of vehicular travel. (Uniform Vehicle Code).

**3.2 Animal-drawn vehicle:** Any vehicle operating or traveling on highways whose primary form of power is a domesticated animal(s) or livestock.

**3.3 Identification emblem, Movable emblem, Slow-moving Vehicle and Vehicular mounted emblem:** Refer to ASAE S276 for definitions.

### 4 Materials Specifications

**4.1 Reflex reflector:** reflective device conforming to SAE J594.

**4.2 Retroreflective material:** Refer to ASAE S279 for specifications of visibility, construction, performance requirements, exterior durability, corrosion resistance, and adhesion for retroreflective sheeting.

**4.2.1 Photometric performance requirements:** Photometric requirements of the retroreflective sheeting shall meet the minimum photometric performance requirements specified in Table 1.

**Table 1 – Minimum photometric performance CD (LX × M<sup>2</sup>)**

Observation Angle	Entrance Angle	Requirements		
		Red	Yellow	White
0.2	–4	60	168	600
0.2	30	60	168	300
0.2	45	15	40	85
0.5	–4	15	29	160
0.5	30	15	29	75
0.5	45	4	11	45

**4.2.2 Color specification:** The retroreflective sheeting shall meet the color specification limits in Table 2 (refer to ASAE S279 for limit definition).

**Table 2 – Color specification limits (daytime)**

Color	1		2		3		4	
	x	y	x	y	x	y	x	y
Red	0.613	0.297	0.708	0.292	0.636	0.364	0.557	0.352
Yellow	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472
White	0.303	0.287	0.368	0.353	0.340	0.380	0.274	0.316

**4.3 Nonreflective red-orange fluorescent material:** Refer to ASAE S279 for specifications of visibility, dimensional requirements, performance requirements, exterior durability, color measurement, and adhesion for nonreflective red-orange fluorescent material.