

## DMS - 8315

### SIGN IDENTIFICATION DECALS

EFFECTIVE DATES: MARCH 2009–JUNE 2009.

**8315.1. Description.** This Specification governs for the materials, composition, quality, sampling, and testing of sign identification decals.

**8315.2. Units of Measurements.** The values given in parentheses (if provided) are not standard and may not be exact mathematical conversions. Use each system of units separately. Combining values from the two systems may result in nonconformance with the standard.

**8315.3. Sampling and Testing.** The Department will sample in accordance with Tex-720-I and will test in accordance with the methods listed in Article 8315.5.

**8315.4. Periodic Evaluation.** The Department reserves the right to conduct random sampling of materials for testing and to perform random audits of test reports. Department representatives may sample material from the manufacturing plant, the project site, and the warehouse. CST/M&P reserves the right to test samples to verify compliance with this Specification.

#### **8315.5. Material Requirements.**

**A. Film Characteristics.** Measure the film thickness to a minimum of 0.003 in. and a maximum of 0.0045 in. The film must:

- Be flexible
- Conform to contoured surfaces
- Have a 60° gloss value of 35, minimum, in accordance with ASTM D 523
- Not support fungus growth

For oven and weathering tests, apply film and completed decals to clean, degreased aluminum test panels. After application of the film or decal, but before testing, age and condition test panels for 48 hrs at 70 to 90°F.

The material must not exhibit more than 1/64-in. shrinkage in any direction from the edge of the test panel when subjected to 140°F for 48 hrs. After 1 week at that temperature, material must retain adhesion to the panel.

**B. Adhesive.** The film contains a pre-coat of a pressure-sensitive adhesive, which allows decal positioning, without bonding, to clean surfaces at temperatures up to 100°F. Bonding is to occur only after pressure is applied.

The adhesive must:

- Form a durable bond to surfaces that are smooth, clean, corrosion-free, and weather-resistant
- Be of uniform thickness

- Be non-corrosive to metal surfaces
- Have no staining effect on the film
- Adhere securely at temperatures from -30°F to 200°F, such that the decal cannot be removed in one piece

Cover the adhesive side of the film with a pre-scored, treated paper liner. Score the liner approximately in the center. At application time, the liner must be removable without soaking in water or other solvents.

**C. Finished Decals.** Completed decals must not discolor, crack, craze, blister, delaminate, peel, chalk, or lose adhesion after 1,200 hrs exposure in accordance with ASTM G 155 using Exposure Cycle 1 with a quartz inner filter glass and Type “S” Borosilicate outer filter glass.

After exposure, the ink must not be faded or discolored.

**D. Decal Design.** Size the non-reflectorized, white, plastic film decal to 3 in. sq. ±1/8 in. Mark the decal to display the face design as shown in Table 1. Face marking must not show any deterioration before the design life of the film material. The decal must be free from ragged edges, streaks, blisters, foreign matter, or other surface imperfections.

**Table 1  
Decal Design**

TxDOT												
C	Fabrication Date											T
J	F	M	A	M	J	J	A	S	O	N	D	
	200		201		202		203		204			
	0	1	2	3	4	5	6	7	8	9		
Sheeting MFR - Substrate												
A	B	C	D	E	F	G	H	J	K	L	M	
Film/Ink MFR												
A	B	C	D	E	F	G	H	I	K	L	M	
Sheeting MFR - Legend												
A	B	C	D	E	F	G	H	J	K	L	M	
Installation Date												
				0	1	2	3					
	0	1	2	3	4	5	6	7	8	9		
J	F	M	A	M	J	J	A	S	O	N	D	
	200		201		202		203		204			
	0	1	2	3	4	5	6	7	8	9		

**8315.6. Payment.**

- A. Procurement by the State.** Payment for all materials under this Specification will be in conformance with the conditions prescribed in the Contract awarded by the Department.
- B. Contracts.** All materials covered by this Specification utilized in the performance of the specified work are subsidiary to the bid item or are paid for in conformance with the bid item in the Contract.

**8315.7. Archived Versions.** Archived versions are available.

ARCHIVE