



Guide for the Collection of Warranties on Sign Face Materials

August 2017

TABLE OF CONTENTS

SECTION 1 - GUIDE FOR THE COLLECTION OF WARRANTIES ON SIGN FACE MATERIALS 3

SECTION 2 - SIGN FACE MATERIALS WARRANTY CLAIM REPORT10

SECTION 3 - NOTIFYING VENDOR OF SIGN FACE MATERIALS WARRANTY CLAIM FOR SIGNAGE TOTALLING <200 FT.²11

SECTION 4 - NOTIFYING VENDOR OF SIGN FACE MATERIALS WARRANTY CLAIM FOR SIGNAGE TOTALLING >200 FT.²12

SECTION 5 - SIGN INSPECTION REPORT14

SECTION 1 - GUIDE FOR THE COLLECTION OF WARRANTIES ON SIGN FACE MATERIALS

Purpose

This guide provides districts with guidance on understanding and collecting the warranties on signs. Sign sheeting is a highly engineered product designed to visibly convey traffic control and direction information during the daytime and at night. Over the years, changing technology of sign sheeting has made it more efficient in night visibility but has also made it more prone to damage in handling.

TxDOT obtains road signs from several different sources:

- construction projects,
- maintenance projects,
- Support Services Division (SSD) purchases from commercial sign shops,
- SSD purchases from the Texas Department of Criminal Justice (TDCJ),
- TxDOT district purchases,
- TxDOT sign shops where pre-processed sign blanks and background sheeting is supplied by SSD from TDCJ, and
- full fabrication of signs by TxDOT sign shops.

In all of these cases, the sign sheeting carries a warranty to perform for between 5 and 12 years, depending on the product.

What are the warranty provisions for sign sheeting?

DMS-8300, “Sign Face Materials,” requires replacement of signs if they do not last for the stated performance period. The performance period is different depending on the type of sheeting used in sign fabrication. Table 1 from the DMS shows the warranty period.

Table 1. Warranty Period (Yr.)

Sheeting Type	Period for Complete Sign Replacement and Installation (Phase 1)	Additional Period for Sheeting Material Replacement Only (Phase 2)
A, B, C	7	3
D	8	4
B _{FL} , C _{FL} , D _{FL} ¹	5	2

1. B_{FL}, C_{FL}, and D_{FL} indicate fluorescent sheeting products in the Type B, C, and D categories.

This table shows that if a sign using Type B_{FL}, C_{FL} or D_{FL} sheeting fails within 5 years, a sign using Type D sheeting fails within 8 years, or a sign using Type A, B, or C sheeting fails within 7 years, the supplier must replace it in its entirety. If it fails after this time, but in less than 7 years (for Type B_{FL}, C_{FL} or D_{FL}), 12 years (for Type D), or 10 years (for Type A, B, or C), the supplier must replace the sheeting so that TxDOT can fabricate a sign to replace the failed one.

The warranty includes the use of one producer's sign face material, (sheeting or EC and black film), applied to a different producer's sign face material. If a failure occurs, assignment of warranty responsibility is to the producer whose material fails. For example, if the sheeting or film used for the legend separates from the sheeting attached to the sign blank, the producer of the legend material will be responsible. Signs fabricated using screen or digital inks must use the same manufacturer for both the reflective sheeting covering the substrate and the ink.

What constitutes a warranted sign failure?

DMS-8300 explains what constitutes warranted sign failure. It says:

The sign face material is unsatisfactory if:

- it deteriorates due to natural causes to the extent that the sign is ineffective for its intended purpose (e.g., when the sign is viewed from a moving vehicle under normal day and night driving conditions), or
- it shows any of the following defects:
 - cracks discernible with the unaided eye from the driver's position, while in an outside lane at a distance of 50 ft. (15 m) or greater from the sign,
 - peeling in excess of 1/4 in. (6.4 mm),
 - shrinkage in excess of 1/8 in. (3.2 mm) total per 48 in. (1.2 m) of sheeting width, or
 - fading or loss of color, or loss of reflectivity to the extent that color or reflectivity fails to meet the requirements of AASHTO M 268, as modified by this Specification.

In summary, a warranted failure is from normal wear and tear on sign sheeting due to environmental causes while the sign is still in the warranty period.

What is not a warranted sign failure?

Signs can be non-effective for a variety of reasons. Some common non-warranty issues are:

- gunshots,

- paint (paintball guns),
- graffiti,
- vehicle impacts,
- signs that wear out after exceeding their warranty life, and
- damage resulting from improper handling.

How do we prevent damaging signs in handling?

Mishandling signs in shipment, storage, and installation can result in damage to sign faces from:

- storing signs improperly in a moist environment (signs may stick to each other, damaging the sheeting when they are separated; mildew can discolor the sign face),
- storing signs in horizontal stacks (weight crushes the sheeting material, destroying night reflectivity), and
- dragging signs on one another (scratching, gouging, and crushing the sheeting destroys daytime appearance and night-time reflectivity).

Item 636 addresses storage and handling of signs to prevent damage. In Article 636.3.2, “Storage and Handling,” states:

Ship, handle, and store completed sign blanks and completed signs so that corners, edges, and faces are not damaged. Damage to the sign face that is not visible when viewed at a distance of 50 ft., night or day, will be acceptable. Replace unacceptable signs.

Store all finished signs off the ground and in a vertical position until erected. Store finished sheet-aluminum substrate signs in a weatherproof building. Extruded aluminum and substrate signs may be stored outside.

This requirement pertains to the contractor when furnishing signs under Item 636, but these are good directions to apply to all signs from all sources.

Additionally, for signs that TxDOT personnel store, transport, and install, there are some specific recommendations.

Storage

Store traffic signs under cover in a dry place and arranged so that warping or disfigurement does not occur. Shelves and vertical compartments are usually constructed in such a manner that the reflectorized face does not come into contact with the adjacent signs. Store signs in a vertical position with air spaces between all signs. Do not use waxed paper to protect stored signs.

Transport

Take care in transporting signs from storage to field location, since the sign face is a soft material and can be damaged very easily. Wrap signs individually in heavy paper or separate by grooved tracks. Do not stack signs horizontally.

Installation

Install signs in compliance with the Sign Mounting Details (SMD) standard sheets.

How do we protect the integrity of the sign warranty, and when does the warranty start?

To be able to enforce a warranty, we must make sure signs are not damaged during shipment, storage, or installation, either by TxDOT or by a contractor. It is also important to inspect signs received at the project site in accordance with the recommendations listed in the [Sign Inspection Guidance Document](#). The warranty period begins upon fabrication; however, the enforceable performance period is adjusted according to the following.

1. For signs fabricated by either TxDOT forces or for SSD purchase, the warranty requirements are effective immediately upon fabrication.
2. For signs fabricated for TxDOT projects, the warranty requirements do not become effective until final acceptance of the project. TxDOT's enforcement of the warranty starts after final acceptance on a project.

DMS-8300.9.B, "Field Performance," states:

Sign face materials processed, applied, stored, and handled according to the producer's recommendations (or as required in this Specification, when there is an exception to the producer's recommendations), must perform satisfactorily for the number of years specified for that sign face material. The performance period begins at the time a sign is fabricated, as indicated by the "Fabrication Date" on the sign identification decal. The warranty requirements go into effect upon final acceptance by the Department. The Department will adjust the performance period to deduct the time between the sign fabrication date and Department acceptance.

What are the guidelines for final acceptance of signs on projects?

Districts should inspect signs received at the project site in accordance with the Sign Inspection Guidance Document, which provides information concerning the documentation that is required to be furnished and the specific inspections that should be performed along with helpful illustrations. Districts should inspect signs for damage from shipping and handling, uniform appearance, and to verify the correctness of the message. Districts should check the back of each sign for the identification decal to ensure that the sign face producer

and sign fabrication date information are punched, and the sign manufacturer's contact information is listed.

A nighttime inspection of the signs should check for uniform appearance within the background and within the legend and borders. Areas that appear dead or are not uniform in color may be cause for rejection of the sign, if the non-uniform appearance is significant enough for the sign to be illegible. (The Sign Inspection Guidance Document provides helpful illustrations.) The nighttime inspection will also reveal damage from shipping and handling that may not be apparent from a daytime inspection. This damage will appear as dark streaks or marks across the sign face where the sheeting is damaged.

Signs rejected prior to final project acceptance are the responsibility of the contractor and do not fall under the warranty provisions of the reflective sheeting. These signs should be replaced at the contractor's expense.

What are the guidelines for monitoring in-service signs?

Inspect all signs, including supports, twice a year for:

- position,
- damage,
- legibility,
- obvious indications of structural distress or failure, and
- general condition.

Conduct one of the two annual inspections at night to check legibility and reflectivity. (See "Inspection Report.")

Make inspection using two people, so one can take notes while the other drives.

All personnel who frequently travel the highways should be instructed to report any obscured or damaged signs. Maintenance personnel should be alert at all times, observing signs for legibility, position, and minor damage that can be addressed by immediate remedial action.

Inspection Report

Documentation of sign inspections is important to a successful sign program. Sign inspectors should fill out an inspection report for each performed inspection. The reports should be filed at the district office with a copy retained by the maintenance supervisor. Typically, a sign inspection report should include:

- the date,
- the maintenance section,
- the supervisor's signature,
- the inspector's signature,

- the roadways checked and findings,
- immediate action taken,
- future action needed, and
- any comments.

To document inspections, inspectors may use the “Sign Inspection Report Form,” a copy of which is attached for your reference and use (see Section 5). The form may be photocopied as necessary. If a different format or a more detailed report is preferred, districts may produce their own form.

If you have any questions about the contents of the “Sign Inspection Report Form,” contact Doug Skowronek, TRF, at 512/416-3120.

When there is a warranty issue, what does the warranty require the sign face material producer to do?

There are two phases to the performance period: Phase 1 requires total sign replacement, and Phase 2 requires only sign face material replacement.

If a sign fails in Phase 1 of the warranty period, requiring replacement of the sign, DMS-8300.9.D, “Producer’s Replacement Obligation,” states:

The producer must cover the costs of replacement of the sign on the roadway or of restoring the sign surface to its original effectiveness as determined by and at no cost to the Department for materials or labor.

Replacement sign face materials must:

- be the same type originally specified unless otherwise approved or directed,
- meet all the requirements of this Specification, and
- appear on the MPL.

Schedule with designated Department personnel, within 30 days of notification of potential replacement obligation, an on-site investigation to determine if the sign face material producer’s obligation exists.

Fulfill all obligations within 120 days after determination of obligations. The Department may replace signs where uncompleted obligations occur and may bill the producer for all Department costs in performing the producer’s replacement obligation.

If a sign fails in Phase 2 of the performance period, requiring only sign face material replacement, the Sign Face Material Producer is responsible for replacing the sign face materials so that TxDOT can fabricate a replacement sign.

How do we process a warranty claim?

When signs fail under warranty, there could be several scenarios:

- isolated failure of a few signs, which should be handled through District channels, or
- widespread failure due to a manufacturing defect, affecting several signs or multiple districts, requiring a coordinated effort and prompt attention from a division approach.

Use the following steps to file a Warranty Claim with the Sign Face Material Vendor (including TDCJ signs).

Step	Action
1	District personnel complete the Sign Face Materials Warranty Claim Report” form (given in Section 2) and forward it to the District’s Director of Traffic Operations with a copy to the Director of CST/M&P for monitoring purposes.
2	<ul style="list-style-type: none">▪ Small Volumes. For warranty claims that involve less than 200 ft.² of signage, the claim process will be handled at the district level. The Director of Traffic Operations will notify the vendor of the suspect signs and will work with the vendor to identify the nature of the material failure and to process any replacement signs or sign face materials under the warranty provision. See the attached sheet for full instructions.▪ Large Volumes. For warranty claims that involve 200 ft.² or more of signs, the Director of Traffic Operations will work in conjunction with CST/M&P to process the claim. Once it has been determined that a material failure covered under warranty has occurred, CST/M&P will notify the vendor of the problem and will work with the district’s Traffic Operations office to resolve the claim. See the attached sheet for full instructions.
3	Upon acceptance of the replacement signs or sign face materials, the District will notify the vendor by letter with a copy to CST/M&P.
4	Vendors who do not resolve any warranty claims will be subject to litigation and removal from the MPL by CST/M&P.

If you have questions on any part of this process, you may contact:

- Johnnie Miller, CST/M&P, at 512/506-5889, or
- Doug Skowronek, TRF, at 512/416-3120.

SECTION 2 - SIGN FACE MATERIALS WARRANTY CLAIM REPORT

Date Warranty Claim Detected: _____

Report filed by: _____
(If reported by citizen, see A below.)

Sign Location(s):

Approximate size of sign(s) (ft²): _____

Reference the label on the back of the sign to obtain the following information:

Warranty Period: From _____ To _____

Fabrication Date: _____ Installation date: _____

Substrate Sheeting Producer: _____

Film/Ink Producer (if applicable): _____

Legend Sheeting Producer (if applicable): _____

Reason for Warranty Claim (describe Warranty Claim): _____

Warranty Obligation:

Complete Sign Replacement and Installation _____
Additional Period for Sign Face Material Replacement Only _____

A. Reserved for complaint call or letter from Citizen

Name: _____

Address: _____

Telephone: _____

Date first detected: _____ (Confirmation letter recommended)

Completed by: _____

Printed Name: _____

SECTION 3 - NOTIFYING VENDOR OF SIGN FACE MATERIALS WARRANTY CLAIM FOR SIGNAGE TOTALLING <200 FT.²

Within 30 days of completion of the “Sign Face Materials Warranty Claim Report,” the district will notify the vendor by formal letter of the warranty claim using the information provided on the report. The letter will give the date the warranty claim was detected and the obligation required by the warranty described in DMS-8300. Instruct the vendor to schedule an on-site investigation within 30 days with designated Department personnel. The site visit will be to verify that a sign face material producer’s obligation exists. The vendor must fulfill all obligations within 120 days after determination of an obligation.

Vendor Warranty Claim to Respond

If the vendor fails to respond to the letter of notification, the district should send a second letter advising of the sign face materials warranty claim, with a copy of the first letter attached for reference. The vendor will have another 10 working days to respond.

If the vendor fails to provide any form of response, the district should refer the matter to CST/M&P for assistance. For those instances where the vendor and TxDOT cannot agree on the nature of the sign failure, the assessment rendered by CST/M&P will govern. If the vendor continues to disregard any warranty claim requests, the matter may be referred to the General Counsel Division for litigation, and the vendor may be removed from the MPL.

Sign Replacement Complete

Upon completion of sign replacement, the TxDOT inspector will approve the material and installation work. Within 10 days, the district will notify the vendor that the obligation under warranty has been met. A formal letter will be used for this purpose, with a copy to CST/M&P.

SECTION 4 - NOTIFYING VENDOR OF SIGN FACE MATERIALS WARRANTY CLAIM FOR SIGNAGE TOTALLING >200 FT.²

Within 30 days of completion of the “Sign Face Materials Warranty Claim Report,” the district will notify CST/M&P of the warranty claim using the information provided on the report. CST/M&P will then schedule an evaluation of the suspect signs with the vendor to determine if there is a warranty claim to process. Once it has been determined that a material failure covered by warranty has occurred, the district’s Director of Traffic Operations will notify the vendor of the problem by letter and will work with CST/M&P to resolve the issue.

The letter will give the date the warranty claim was detected and the obligation required by the warranty described in DMS-8300. The letter should instruct the vendor to fulfill all obligations within 120 days. The vendor will have 10 working days to respond with their intentions to address the sign face materials warranty claim.

Vendor Warranty Claim to Respond

If the vendor fails to respond to the letter of notification, the district’s Director of Traffic Operations will send a second letter advising of the sign face materials warranty claim, with a copy of the first letter attached for reference. The vendor will have 10 working days to respond.

If the vendor fails to provide any form of response, the district will refer the matter to CST/M&P for assistance. For those instances where the vendor and TxDOT cannot agree on the nature of the sign failure, the assessment rendered by CST/M&P will govern. If the vendor continues to disregard any warranty claim requests, the matter may be referred to the Office of General Counsel for litigation, and the vendor may be removed from the MPL.

Sign Replacement Complete

Upon completion of sign replacement, the TxDOT inspector will approve the material and installation work. Within 10 days, the district will notify the vendor that the obligation under warranty has been met. A formal letter will be used for this purpose with a copy to CST/M&P.

Texas Department of Transportation												
C	Fabrication Date											T
J	F	M	A	M	J	J	A	S	O	N	D	
	201		202		203		204		205			
	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 MFR												
A	B	C	D	E	F	G	H	J	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	
	201		202		203		204		205			
	0	1	2	3	4	5	6	7	8	9		
Name of Sign Fabricator Physical Address City, State, Zip Code												

Figure 1. Updated identification decal placed on back of signs (Reference Special Provision to Item 643, “Sign Identification Decals.”)

SECTION 5 - SIGN INSPECTION REPORT

Maintenance Section: _____ Inspection Date: _____

Supervisor: _____

Reported by: _____

Roadways Checked and Findings: _____

Immediate Action: _____

Action Needed: _____

Comments: _____
