# FEATURE 232
*SURFACE LAYERS*

| Roadway Side | Allows Tie | LRS Package | Feature Type | Interlocking | Secured |
|---|---|---|---|---|---|
| C/R/L | Yes | No | Length | No | Yes |
| **Responsible Party for Data Collection** | District Planning | | | | |

**Definition/Background:** Records the limits of the friction course layer, and pavement surface layer.

Codes for this feature are updated by the State Materials Office. New codes are added as needed for new materials that have been approved for usage.

## FRICTCSE | FRICTION COURSE

| HPMS | MIRE | Who/What uses this Information | Required For | Offset Direction | Offset Distance |
|---|---|---|---|---|---|
| 49 | 26 | Pavement Management, HPMS | All functionally classified roadways on the SHS. | N/A | N/A |

**Definition/Background:** The friction course is the layer of non-skid surface on top of the surface type or structural course.

**How to Gather this Data:** In office—It may be found on construction plans. Enter code 0-9. On a divided highway, obtain the friction course for each side separately.

*Code 0*—None if no friction course exists, i.e., on concrete roadways.

**Special Situations:** Call the project manager of any project when two or more type materials are indicated on construction plans.

| Codes | Descriptions |
|---|---|
| **0** | None |
| **1** | Type 1 |
| **2** | Type 2 |
| **3** | Type 3 |
| **4** | Type 4 |
| **5** | Type 5 |
| **6** | Type 6 |
| **7** | Type 9.5 |
| **8** | Type 12.5 |
| **9** | Other |

## ~~SURFLXTH | PAVEMENT SURFACE THICKNESS (X=1-7)~~ – (RETIRED AS OF NOVEMBER 2025)

| ~~HPMS~~ | ~~MIRE~~ | ~~Who/What uses this Information~~ | ~~Required For~~ | ~~Offset Direction~~ | ~~Offset Distance~~ |
|---|---|---|---|---|---|
| ~~56-58~~ | | ~~Pavement Management, HPMS~~ | ~~HPMS standard samples on all roadways functionally classified as interstate, other freeways and expressways, and other principal arterials.~~ | ~~N/A~~ | ~~N/A~~ |

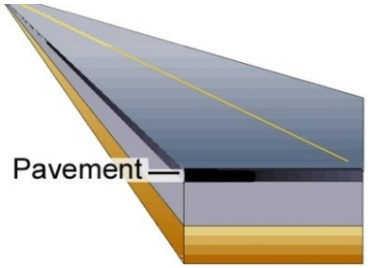
~~**How to Gather this Data:** Record the surface layer thickness to the nearest inch. SURFL1TH corresponds to the bottom surface layer; SURFL2TH is the next to the bottom layer, and so forth.~~

~~**Value Pavement Surface Thickness:** 4 Bytes: XX.XX – Enter 01.00-16.00 to nearest inch. It is not necessary to code all decimal places.~~

## SURFLAYX | PAVEMENT SURFACE LAYER (X=1-7)

| HPMS | MIRE | Who/What uses this Information | Required For | Offset Direction | Offset Distance |
|---|---|---|---|---|---|
| 49 | | Pavement Management, HPMS | HPMS standard samples on all roadways functionally classified as interstate, other freeways and expressways, and other principal arterials. | N/A | N/A |

**Definition/Background:** The surface is the composite of the roadway designed to be used for the driving surface. This composite can be made from many materials of different composition and have numerous layers.




**How to Gather this Data:** Identify and record the corresponding composite material code from the list below. SURFLAY1 corresponds to the bottom surface layer, SURFLAY2 is the next to the bottom layer, and so on. Construction plans, Pavement Management Office, county and local engineers.

**Special Situations:** If the pavement surface layer information cannot be determined nor collected due to lack of construction plans or other resources, then code UNKW-unknown. Do not make up data.

| Codes | Descriptions |
|---|---|
| **ARMI** | Asphalt Rubber Membrane Interlaced |
| **BIND** | Asphalt Binder Course |
| **BRCK** | Brick Pavers |
| **CONC** | Portland Cement Concrete |
| **CRL** | Crack Relief Layer |
| **FAB** | Pavement Overlay Fabric |
| **FC** | Friction Course |
| **FC1** | Friction Course 1 |
| **FC2** | Friction Course 2 |
| **FC3** | Friction Course 3 |
| **FC4** | Friction Course 4 |
| **FC5** | Friction Course 5 |
| **FC5B** | Friction Course 5 Bonded |
| **FC6** | Friction Course 6 |
| **F12M** | Friction Course 12.5 Modified |
| **F125** | Friction Course 12.5 |
| **F95** | Friction Course 9.5 |
| **F95M** | Friction Course 9.5 Modified |

| Codes | Descriptions |
|---|---|
| **S** | Type S Asphaltic Concrete |
| **SAHM** | Sand Asphalt Hot Mix |
| **SP1C** | 9.5MM Superpave Coarse Graded |
| **SP1F** | 9.5MM Superpave Fine Graded |
| **SP2C** | 12.5 Superpave Coarse Grade |
| **SP2F** | 12.5MM Superpave Fine Graded |
| **SP3C** | 19.0MM Superpave Coarse Graded |
| **SP3F** | 19.0MM Superpave Fine Graded |
| **ST** | Surface Treatment |
| **S1** | Type S-I Asphaltic Concrete |
| **S2** | Type S-II Asphaltic Concrete |
| **S3** | Type S-III Asphaltic Concrete |
| **T1** | Type I Asphaltic Concrete |
| **T2** | Type II Asphaltic Concrete |
| **T3** | Type III Asphaltic Concrete |
| **UNIM** | Unimproved Surface |
| **UNKW** | Unknown |
| **WC** | Wearing Course |
| **WC1** | Wearing Course 1 |
| **WC2** | Wearing Course 2 |
| **WC3** | Wearing Course 3 |
| **WC4** | Wearing Course 4 |
| **WC5** | Wearing Course 5 |
| **WC6** | Wearing Course 6 |
| **WC7** | Wearing Course 7 |
| **WC8** | Wearing Course 8 |

## EXAMPLES

Example of coding SURFLAY1 = S3

| | | |
|---|---|---|
| Friction Course | 1 INCH | FC - 4 |
| Surface layer 1 | 3 INCHES | Type = S3 |
| Base | | |

After the friction course is milled off, a new 4" surface layer and a new friction course are applied

| | | |
|---|---|---|
| Friction Course | 1 INCH | FC - 6 |
| Surface Layer 2 | 4 INCHES | Type = S3 |
| Surface Layer 1 | 3 INCHES | Type = S3 |
| Base | | |