



WVDOH
Materials Division



Asphalt Section Update

45TH ASPHALT PAVING CONFERENCE

FEBRUARY 20, 2025

EMBASSY SUITES - CHARLESTON, WV

SHAWN JACK

DELETE THE CONTENTS OF THE SUBSECTIONS 410.13.6, 410.13.6.1, AND 410.13.6.2, AND REPLACE WITH THE FOLLOWING:

410.13.6-Bond Strength Adjustment: Bond Strength PWL calculations shall be in accordance with 410.13.50, Guide to Statistical Analysis of Material Using Quality Level Analysis-Percent within Limits. However, for the purpose of relieving large standard deviations from abnormally strong samples, any sample with a strength exceeding 150 psi will be evaluated as 150 psi instead of the actual strength. The actual strength should still be recorded as such on the reporting form.

Bond Strength positive adjustments will be calculated for lots with PWL greater than or equal to 90. Bond Strength Negative adjustment will be calculated for lots with PWL less than or equal to 70. There is no adjustment for bond Strength lots who's PWL falls between 70 and 90.

Positive adjustment calculated as follows:

$$\text{\$T} = \frac{\text{PWL} - 90}{10} \times 2,000$$

Negative adjustment calculated as follows:

$$\text{\$T} = \frac{70 - \text{PWL}}{70} \times 40,000$$

Adjustments calculate for lots less than or greater than the standard 2,500 tons shall be prorated directly proportional to the amount of tonnage less than or greater than 2,500 tons.

410.13.6-Bond Strength Adjustment: For Interstates and divided NHS Routes, bond Strength PWL calculations shall be in accordance with MP 401.13.50, Guide to Statistical Analysis of Material Using Quality Level Analysis-Percent within Limits. However, for the purpose of relieving large standard deviations from abnormally strong samples, any sample with a strength exceeding 150 psi will be evaluated as 150 psi instead of the actual strength. The actual strength shall still be recorded as such on the reporting form.

Bond Strength Negative adjustment will be calculated for lots with PWL less than or equal to 70. There is no adjustment for bond Strength lots who's PWL is greater than 70.

Negative adjustment calculated as follows:

$$\$T = \frac{70 - \text{PWL}}{70} \times 25,000$$

Adjustments calculate for lots less than or greater than the standard 2,500 tons shall be prorated directly proportional to the amount of tonnage less than or greater than 2,500 tons. This shall be calculated on the theoretical tonnage for the lot, not the actual tonnage used.

For two-lane and non-divided NHS Routes, refer to Section 410.13.7.4.

Evolution of PWL Bond Strength in the 410 Specification

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$$ST = \frac{70 - PWL}{70} \times 25,000$$

TABLE 401.13.3B

Adjustment of Contract Price for Pavement Joint Density	
Percent of Joint Density	Percent Adjustment
Greater than 97 %	Note-3
90% to 97% ^{Note 4}	0%
89 % ^{Note 5}	-1.0%
88 % ^{Note 5}	-3.0%
Less than 88 %	Note 5 and 6

Note 3: Density greater than 97% is normally only a problem if it leads to asphalt flushing on the surface of the mat or rutting due to an unstable mix. The Division will make a special evaluation of the material and determine the appropriate action.

Note 4: If the longitudinal joint density is determined to be less than 92% on 25% or more of the total project LOTs, then the Contractor shall be required to seal the joint a minimum of 3" on each side of the joint with a heated PG 64S-22 binder (or approved equivalent) on the entire project at no additional cost to the Division.

Note 5: Any longitudinal joint densities determined to be below 90% the Contractor shall be required to seal the joint a minimum of 3" on each side of the joint on the entire project with a heated PG 64S-22 binder (or approved equivalent) at no additional cost to the Division

Note 6: Density values less than the minimum specified 90% will be more susceptible to accelerated deterioration of both the joint and the surrounding pavement. For Joint densities less than 88%, the percent of adjustment will be decreased by an additional 6% per percentage of joint density less than 88%, unless a Special evaluation performed by the Division determines a more appropriate action.

401 Pavement Joint Sealing

- Proposed Revisions
 - Joint Sealing pay item to be added to each 401 paving contract
 - Current requirements will still apply
 - Less than 92% on 25% or more of total lots- contractor seals at no cost to Division
 - Any joint density below 90% - contractor seals at no cost to Division
 - New requirements
 - If joint density requirements are all satisfactory
 - Contractor will seal the longitudinal joint using pay item

Asphalt Release Agents

- What ARA's are AASHTO Product Evaluation and Audit Solutions evaluated?
- APEAS is subscription based
- Full access to database limited to producers and participating State DOT's
- Public option available
 - Must create account
 - Limited info
- List on APL Webpage
- **NOT AN APL!!**
- https://transportation.wv.gov/highways/mcst/Pages/APL_By_Number.aspx

Division Approved Product Lists (APLS)

Featured Resources:

- [Approved Product Listings \(APLs\)](#)
- [Certification](#)
- [Upcoming Contracts](#)
- [Material Procedures \(MPs\)](#)
- [Organizational Structure](#)
- [Tool Box](#)
- [2024 Materials Construction Conference](#)
- [AWP - Material Access](#)

The Division utilizes a list of approved sources for acceptance of materials and sources that are suitable for acceptance at a reduced testing frequency.

These are organized by Material Code. If you cannot find a specific list, try Ctrl-F on your keyboard and enter a search for the name of the list.

[Map: Approved Aggregate, Asphalt, Cement and Concrete Sources](#)

[New Product Analysis Procedure](#)

Qualified Purchase Order Materials

[Asphalt Release Agents](#) ←

Approved Product Lists

605.003.001 - Welded Frames and Grates | [January 2025](#) | [April 2015](#)

AASHTO PRODUCT EVALUATION AND AUDIT SOLUTIONS (APEAS) EVALUATED ASPHALT RELEASE AGENTS

This is not an Approved Products List. Products listed have been evaluated by APEAS. Section 401.9.7 of the Standard Specifications requires an Asphalt Release Agent to be evaluated by APEAS. In addition, for mixtures using neat binders, the ARA producer/supplier must certify the product as harmless to the mix. For mixes using polymer modified binders, the release agent must be recommended by the binder supplier.

ARA-2024-01-011	Zep, Inc.	ZEP BMF ASPHALT RELEASE AGENT	Complete
ARA-2024-01-010	Zep, Inc.	ZEP PINNACLE ASPHALT RELEASE AGENT	Complete
ARA-2024-01-009	Zep, Inc.	ZEP NO. 1 ASPHALT RELEASE AGENT	Complete
ARA-2024-01-006	Chemtek, Inc.	NoTrax	Complete
ARA-2024-01-007	Chemtek, Inc.	BADASS (BA)	Complete
ARA-2024-01-006	Chemtek, Inc.	PavePro Blue	Complete
ARA-2024-01-004	Meyer Lab	Ultra Slider	Complete
ARA-2024-01-003	Brody Chemical	Top Shelf Asphalt Release	Complete
ARA-2024-01-002	Solutions ⁷	EZ-2 Slide	Complete
ARA-2024-01-001	Arrow Magnolia International	SUPER SLICK	Complete
ARA-2023-01-018	CCL Supply	Ceramic Slidem	Complete
ARA-2023-01-017	3S Chemicals LLC	MUCK OFF! BED RELEASE	Complete
ARA-2023-01-016	Tec-Team Ind., Inc.	Tec-Shield RTU	Complete
ARA-2023-01-012	DuBois Chemicals	Du-Slip II	Complete
ARA-2023-01-009	Emulso	AR-92	Complete
ARA-2023-01-008	ChemStation	8442	Complete
ARA-2023-01-007	Meyer Lab	Super Slider	Complete
ARA-2023-01-006	MAVERICK SOLUTIONS	AS-104	Complete
ARA-2023-01-005	ChemStation	20189	Complete
ARA-2023-01-004	Heritage Research Group	BitRA	Complete
ARA-2023-01-003	SoySolv Biosolvents LLC.	TackSolv	Complete
ARA-2023-01-002	BioNeat Inc.	BioNeat NTS-1 [™] Asphalt Release Agent	Complete
ARA-2023-01-001	DuBois Chemicals	SLICK-EM-5000	Complete
ARA-2022-01-012	ChemStation	8277	Complete
ARA-2022-01-010	BG Chemical	Loose Juice	Complete
ARA-2022-01-009	Chemtek, Inc.	BA30	Complete
ARA-2022-01-007	ChemStation	22172	Complete
ARA-2022-01-006	Industrial Oils Unlimited	Asphalt Release Green S	Complete
ARA-2022-01-005	HCE Technology	Surface Slide	Complete
ARA-2022-01-004	Lubrication Technologies, Inc.	Lube-Tech Endurance HD Asphalt Release Agent	Complete
ARA-2022-01-003	BG Chemical	Black Magic	Complete
ARA-2022-01-002	Meyer Lab	Avalanche 2022	Complete
ARA-2022-01-001	BG Chemical	GreenGuard	Complete
ARA-2021-01-014	ChemStation	ChemStation 29301	Complete
ARA-2021-01-013	ChemStation	ChemStation 20614	Complete
ARA-2021-01-012	Brody Chemical	First Choice Concentrate	Complete
ARA-2021-01-008	ChemStation	400190	Complete
ARA-2021-01-007	Kop-Coat Protection Products	slipARay	Complete
ARA-2021-01-006	ChemStation	4896	Complete
ARA-2021-01-005	S&S Chemicals	FreeFall	Complete
ARA-2021-01-003	Industrial Chem Solutions, Inc. (formerly: KT Chemicals, Inc.)	Popcorn Buster	Complete
ARA-2021-01-002	CLEANEDGE LLP	2217	Complete
ARA-2020-01-020	ChemStation	4147OC	Complete
ARA-2020-01-019	AmChem Industrial	Magnum AR	Complete
ARA-2020-01-018	AmChem Industrial	Formula 1	Complete
ARA-2020-01-015	Brody Chemical	First Choice Plus	Complete
ARA-2020-01-014	Brody Chemical	First Choice	Complete
ARA-2020-01-011	Solutions ⁷	UltraSlide AR	Complete
ARA-2020-01-010	Suncoast Research Labs Inc. D.B.A. Citrus Depot	CITRUS KING RELEASE AGENT	Complete
ARA-2020-01-009	Evergreen Solutions	ReleaSol	Complete
ARA-2020-01-008	Global Barrier Services	Slipcoat-IRC	Complete
ARA-2020-01-004	ChemStation	2645	Complete
ARA-2020-01-001	DuBois Chemicals	Slick EM HF	Complete
ARA-2019-04-001	Industrial Chemical Solutions, LLC	RELEASE Asphalt Release Agent	Complete
ARA-2019-03-005	Vision Chemical Systems, Inc.	RELEASE	Complete
ARA-2019-03-004	ChemStation	44189	Complete
ARA-2019-03-002	Chem-Tech Solutions, Inc.	Westech CT-1470 PowerGlide Asphalt Release Agent	Complete
ARA-2019-03-001	DeltaGreen Products, Inc.	TA-200 GS Asphalt Solutions	Complete

AASHTO

This is not an
Release Agent

PHALT

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Questions??
