

Steps for FDR Mix Design Checklist

Regardless of the stabilizing agent used, a laboratory mix design should be conducted in order to optimize the quantity of stabilizing agent and physical properties of the reclaimed FDR mixture. The data is used to develop mixture properties that will ensure the mixture will exhibit adequate strength, durability, and resistance to moisture-induced damage.

FDR mix designs should include the following general procedures described in the checklist below.

Note that some specifications described in the following content may not be the same as the specifications followed by your agency. Always check with your State agency's standards and specifications when using these guidelines.

Sections

- Steps

Steps

1. Obtain samples of asphalt pavement, base, and underlying materials from the roadway
2. Crush asphalt pavement to generate reclaimed asphalt pavement (RAP)
3. Combine RAP, base, and underlying materials to desired percentage
4. Determine gradation, plasticity index, and sand equivalent of combined materials
5. Determine need for and select stabilizing agent and additives, if necessary, based on structural and material requirements
6. Determine maximum dry density and optimum moisture content of combined materials

Full Depth Reclamation (FDR) AT-TC3MN027-18-T1-JA02

- 7. Mix and compact specimens at desired moisture content with varying percentages of stabilizing agent
- 8. Cure specimens
- 9. Test trial mixtures for strength and durability
- 10. Establish the job mix formula
- 11. Make adjustments in the field as necessary