

FLOWABLE FILL **FOR URBAN USES**

Road School
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What is Flowable Fill?

Flowable Fill Is:

An Engineered Backfill Material That:

- Is Self Leveling
- Obtains Total Compaction
- Requires No Consolidation (vibration)
- Makes Backfilling Faster
- Saves Contractors on Their Total In-Place Backfill Costs.
- DOES NOT FAIL!

What is Flowable Fill Made Of?

- | | |
|-------------------------|------------------------|
| -Fine Aggregate | -Flyash (not required) |
| -Small Amount of Cement | -Water (2x concrete) |

NO COARSE AGGREGATE

Are There Different Mixes?

Standard Mixes

Low or NO entrained air
 Moderate Flow
 Cement, Flyash, Sand & Water
 Low, Medium & High Strengths
 Quicker "Set"

High Air Mixes

High Air Content (>15%)
 Excellent Flow
 Cement, Flyash, Sand & Water +
 Entraining Admixture
 Usually Lower Strengths
 Slower "Set"



IRMCA

What Should I Know About Strength?

Hand Removable: < 75 psi

Machine Removable: 75 to 150 psi

Non Removable: >150 psi

How Is Flowable Fill Tested?

Flow

- open ended 3" diameter by 6" tall cylinder
- spread \geq 8"

Strength

- currently INDOT uses cylinder
- will change to penetrometer

Only Flow is to be tested on site



Typical Street Cut

Steps to Successful Road Cuts:

1. Cut Pavement Surface
2. Cut Excavation
3. Install Pipe
4. Tie Down Pipe
5. Do Berm & Shoulder Work
6. Backfill with Flowable Fill
7. Patch Pavement
8. Open Road

