



GoldenAir®

T E C H N I C A L B U L L E T I N

Product Data Sheet FORTA® GoldenAir® Liquid Foaming Agent

FORTA® GoldenAir® Flowable Fill concrete mixes may be formulated to a wide range of flow, strength, and weight characteristics. Rather than searching for soil of a specific density, trucking it to the jobsite, trying to artificially control the water content, compacting with equipment, and facing quality control problems, simply fill the excavated void and all its small fissures completely with easy-to-use FORTA® GoldenAir® flowable fill.

The air cell structure of FORTA® GoldenAir® is a very stable, well-distributed air void system that moves like a pile of lubricated ball bearings sliding one over the other, eliminating the need for excess water to produce a very fluid Controlled Low Strength Material (CLSM). When mixed in the ready mix truck, FORTA® GoldenAir® foaming agent consistently creates a 20-24% volume increase due to the air cell system, mix after mix, on project after project.

PHYSICAL PROPERTIES

Appearance	Clear golden liquid
Active Ingredients	Approximately 40%
Specific Gravity	1.03 at 70°
Viscosity at 70° F	35 cs minimum
pH	7.5-9.0
Solubility	Completely soluble in water. Suitable for foam generation in hard or soft water.
Chloride Content	<0.35%
Shelf Life	Indefinite in closed factory sealed containers.

PACKAGING: Polyethylene Containers

	<u>12 – 30 oz. Bottles</u>	<u>5 gallon plasticans</u>	<u>55 gallon drums</u>
Gross Weight	27 lbs.	47 lbs.	505 lbs.
Net Weight	24 lbs.	44 lbs.	475 lbs.
Tare	3 lbs.	3 lbs.	30 lbs.

BENEFITS

- Fast
- Economical
- Level Seeking
- Self-Compacting
- Fills Any Opening
- Shrink Resistant
- Easy to Excavate
- Non-Conductive
- Non-Corrosive
- Sound Deadening

APPLICATIONS

- Utility Trenches
- Building Excavations
- Pipe Bedding
- Road Base
- Sub-Base Stabilization
- Abandoned Tank Fills
- Soil Stabilization
- Sink-Hole Fills
- Abandoned Mine Fills
- ICF Wall Back-Fills

FORTA[®] GoldenAir[®] Controlled Low Strength Material (CLSM)

FORTA[®] GoldenAir[®] flowable fill is a lightweight foam-enhanced cementitious fill material, which is purchased from your local ready-mix supplier. FORTA[®] GoldenAir[®] (CLSM) is manufactured by mixing Portland cement, sand, and FORTA[®] GoldenAir[®] liquid concentrate in the concrete mixer according to exact pre-engineered mix designs.

FORTA[®] GoldenAir[®] (CLSM) material is delivered ready for placement by factory-trained ready-mix drivers directly to your jobsite.

Our highly qualified professionals and our extensive manufacturing and field support team back FORTA's 25 plus years of concrete experience.

– GUIDE SPECIFICATION –

1. SCOPE OF WORK:

The FORTA[®] GoldenAir[®] trained contractor shall furnish labor, materials, equipment, and supervision for the installation of FORTA[®] GoldenAir[®] fill material in accordance with the drawings and specifications.

2. MATERIALS:

2.1 FORTA[®] GoldenAir[®] liquid concentrate shall be supplied by FORTA Corporation. FORTA[®] GoldenAir[®] liquid concentrate shall comply with the standard specifications of ASTM C-869 when tested in accordance with ASTM C-796.

2.2 Portland cement shall comply with ASTM C-150, Type I, II, or III.

2.3 Mixing water shall be potable and free from deleterious amounts of acid, alkali, salts, oils, and organic materials which would adversely affect the setting time or strength of the FORTA[®] GoldenAir[®] fill material.

2.4 Admixtures for reducing water, accelerating set, etc. may be used when specifically approved by FORTA[®] and used in accordance with the admixture manufacturer's recommendations.

3. MIX DESIGN:

Mix design shall be in accordance with FORTA's recommendations for a maximum compressive strength of _____ pounds/square inch (psi) at 28 days.

4. MIXING AND PLACING FORTA[®] GoldenAir[®] FILL:

FORTA[®] GoldenAir[®] flowable fill shall be mixed and delivered by a factory trained ready-mix company, and placed in a manner approved by FORTA Corporation.

5. TESTING

Four (4) specimens shall be taken at the point of placement for each 100 cubic yards of FORTA[®] GoldenAir[®] fill material. Specimens shall be prepared, handled, stored, cured, weighed, and tested in accordance with ASTM C-495 procedures.

6. SPECIAL CONSIDERATIONS:

Contact FORTA Corporation for design assistance.

**FORTA Corporation
100 FORTA Drive
Grove City, PA 16127-6399
Telephone: 800-245-0306
Fax: 724-458-8331
www.fortacorp.com**