

LASSENITE POZZOLAN & SAND MIX DESIGNS

FOR

TOPDRESSING, DRILL & FILL, DRYJECT® & ROOTZONE CONSTRUCTION

Based upon volumetric calculations

Assumptions:

One cubic yard of sand weighs 2,700 lbs or 1.35 tons
One cubic yard of Lassenite weighs 1,107 lbs or 0.5535 tons
One cubic foot of Lassenite weighs 41 lbs

TOPDRESSING

For One Cubic Yard of One Ton of Greensmix:

90% Sand/10% Lassenite:

$0.90 \times 2700 \text{ lbs/yd}^3 = 2,430 \text{ lbs Sand}$
 $0.10 \times 1,107 \text{ lbs/yd}^3 = 111 \text{ lbs Lassenite}$

Each cubic yard of 90/10% blended Greensmix will weigh 2,541 lbs

Each ton of 90/10% blended Greensmix will contain 1,913 lbs sand and 87 lbs Lassenite

85% Sand/15% Lassenite:

$0.85 \times 2700 \text{ lbs/yd}^3 = 2,295 \text{ lbs Sand}$
 $0.15 \times 1,107 \text{ lbs/yd}^3 = 166 \text{ lbs Lassenite}$

Each cubic yard of 85/15% blended Greensmix will weigh 2,461 lbs

Each ton of 85/15% blended Greensmix will contain 1,865 lbs sand and 135 lbs Lassenite

80% Sand/20% Lassenite:

$0.80 \times 2700 \text{ lbs/yd}^3 = 2,160 \text{ lbs Sand}$
 $0.20 \times 1,107 \text{ lbs/yd}^3 = 221 \text{ lbs Lassenite}$

Each cubic yard of 80/20% blended Greensmix will weigh 2,381 lbs

Each ton of 80/20% blended Greensmix will contain 1,811 lbs sand and 188 lbs Lassenite

70% Sand/30% Lassenite:

$0.70 \times 2700 \text{ lbs/yd}^3 = 1,890 \text{ lbs Sand}$
 $0.30 \times 1,107 \text{ lbs/yd}^3 = 332 \text{ lbs Lassenite}$

Each cubic yard of 70/30% blended Greensmix will weigh 2,222 lbs

Each ton of 70/30% blended Greensmix will contain 1,701 lbs sand and 299 lbs Lassenite

Example: One sixteenth inch of 70% Sand 30% Lassenite to cover 100,000 ft²

$100,000 \text{ ft}^2 \times .005 \text{ ft } (.0625''/12'') = 500 \text{ ft}^3 \text{ Topdressing material}$
 $500 \text{ ft}^3/27 \text{ ft}^3 = 18.52 \text{ yd}^3 \times 2,222 \text{ lbs/ yd}^3 = 41,151 \text{ lbs or } 20.2 \text{ tons of } 70/30\% \text{ blend required}$

Example: One sixteenth inch of 70% Sand 30% Lassenite to cover One Acre
(43,560 sq ft)

$43,560 \text{ ft}^2 \times .005 \text{ ft } (.0625''/12'') = 218 \text{ ft}^3 \text{ Topdressing material}$
 $218 \text{ ft}^3/27 \text{ ft}^3 = 8.1 \text{ yd}^3 \times 2,222 \text{ lbs/ yd}^3 = 18,000 \text{ lbs or } 9 \text{ tons of } 70/30\% \text{ blend required}$

DRILL & FILL

Using a one inch drill bit at an application rate of 0.25 yd³ per 1,000 ft².
The area of application consists of 100,000 ft² of greens

$.25 \text{ yd}^3 \times 100 (100,000/1,000) = 25 \text{ yd}^3$
 $25 \text{ yd}^3 \times 1,107 \text{ lbs/ yd}^3 \text{ Lassenite} = 13.84 \text{ tons}$
 $13.84 \text{ tons} \times .10\% \text{ waste} = 1.38 \text{ tons} + 13.84 = 15.2 \text{ tons of Lassenite required}$

DRYJECT®

Using 3'' x 2'' spacing at an application rate of 5 ft³ per 1,000 ft².
The area of application consists of 100,000 ft² of greens

$5 \text{ ft}^3 \times 100 (100,000/1,000) = 500 \text{ ft}^3$
 $500 \text{ ft}^3 \times 41 \text{ lbs/ ft}^3 \text{ Lassenite} = 20,500 \text{ lbs or } 10.25 \text{ tons of Lassenite required}$

Using 3'' x 3'' spacing at an application rate of 4 ft³ per 1,000 ft².
The area of application consists of 100,000 ft² of greens

$4 \text{ ft}^3 \times 100 (100,000/1,000) = 400 \text{ ft}^3$
 $400 \text{ ft}^3 \times 41 \text{ lbs/ ft}^3 \text{ Lassenite} = 16,400 \text{ lbs or } 8.2 \text{ tons of Lassenite required}$

Using 3'' x 4'' spacing at an application rate of 3 ft³ per 1,000 ft².
The area of application consists of 100,000 ft² of greens

$3 \text{ ft}^3 \times 100 (100,000/1,000) = 300 \text{ ft}^3$
 $300 \text{ ft}^3 \times 41 \text{ lbs/ ft}^3 \text{ Lassenite} = 12,300 \text{ lbs or } 6.15 \text{ tons of Lassenite required}$