

# Walkthrough

Quick & easy figures to try out the app!

# CALCULATORS

## Calculates pounds of explosives per borehole



EXPLOSIVES PER BOREHOLE <u>Constructio</u>n 3.0" diameter 30' powder column .95 density (anfo) Quarry 6.5" diameter 42' powder column .95 density (anfo)



ROCK

PER BOREHOLE

#### Calculates rock per borehole in tons or cubic yards <u>Construction</u> (yards) <u>Quarry</u> (tons)

7' burden 12' depth 7' spacing <u>Quarry</u> (tons) 16' burden 50'depth 16' spacing .084 tons per cubic foot rock weight



GROUND VIBRATION PREDICTION

#### **Calculates ground vibration prediction**

Bituminous Coal Worst Case: Bituminous Coal Average: Construction Worst Case: Construction Best Case: Construction Trenching: Quarry Production Worst Case: Quarry Production Average: Custom: 

 1500' distance
 600 lbs.

 1500' distance
 600 lbs.

 50' distance
 1.5 lbs.

 25' distance
 5 lbs.

 50' distance
 1 lb.

 1500' distance
 600 lbs.

 Insert custom figures



#### **Calculates angle of borehole**

Example: 50' face height with burdens of 15' (top) and 27' (bottom) 50' face height 15° angle



#### **Calculates powder by tons per pound or pounds per yard** Copy end results from previous Explosives per Borehole and Rock per

POWDER FACTOR Construction 87.34 lbs. explosives 21.78 cubic yards rock

Borehole calculations

<u>Quarry</u> 574.01 lbs. explosives 1,075.2 tons rock



### Calculates pounds of explosives for scaled distance

Example: Scaled distance of 30 <u>Construction</u> 30 scaled distance 100' distance

<u>Quarry</u> 30 scaled distance 1,000' distance



### **Calculates airblast prediction**

133 dBL maximum Pennsylvania state regulation Use previous figures from Scaled Distance

<u>Construction</u> 100' distance 11 lbs. Quarry 1,000' distance 1,111 lbs. explosives

## TOOLS



#### Design custom layouts using delayed sequences

Set number of holes, then tap or drag finger to create delay sequences . App shows doubles in red. Turn on heat map to visualize shot. Save layouts to projects.







Stores individual calculations and notes per project

Save any previous calculation to current or previous project, then easily load it at any time. App will automatically detect your location with GPS and use this information to store each individual project within the app. Return to the same location at any time and app will automatically know the project or site at which you are.



#### Determines degree of angles and level of plane

Example: After using Borehole Angle Drift calculator, lay level against drill steel to determine constant proper angle during drilling



**Displays current time** and date or...



Timed Countdown

**Displays custom timer** throughout app and notifies by alarm when timer is complete



**Determines GPS location** Provides coordinates and information regarding your current location



Standard Calculator Basic calculator included so vou don't have to leave the app



**Determines GPS location** Provides coordinates and

information regarding your current location



**Custom Settings** Set your preferences

## RESOURCES



### **Links to Online Blasting Resources**

Tips how to use the app, plus quick links to:

- MSHA: Safety Standards
- OSM: Office of Surface Mining
- ATF: Explosives Storage Requirements
- ISEE: International Society of Explosives Engineering
- Regulations for individual states, including PA, NJ, NY and more.