



Specifications

Mineral Vermiculite (Raw)	<ul style="list-style-type: none"> Mineral Mica's family, basically consist of silicates of aluminium, magnesium and iron.
Mineral Vermiculite (Expanded)	<ul style="list-style-type: none"> Expanded vermiculite with thermic treatment with temperatures above 700 °C the mineral expands increasing volume of 15 to 20 times
Vermiculite (Category)	<ul style="list-style-type: none"> General-Mineral
Identification Colour	<ul style="list-style-type: none"> Bronze-Yellow
Streak	<ul style="list-style-type: none"> Pale yellow
Refractive index	<ul style="list-style-type: none"> Translucent
Lustre	<ul style="list-style-type: none"> Vitreous
Mohs Scale hardness	<ul style="list-style-type: none"> 1.5-2
Specific gravity	<ul style="list-style-type: none"> 2.4-2.7
Crystal system	<ul style="list-style-type: none"> Monoclinic
Crystal habit	<ul style="list-style-type: none"> Clay, scaly, aggregate
Cleavage	<ul style="list-style-type: none"> Perfect
Fracture	<ul style="list-style-type: none"> Uneven
Pleochroism	<ul style="list-style-type: none"> None
Chemical formula	<ul style="list-style-type: none"> $(MgFe,Al)_3(Al,Si)_4O_{10}(OH)_2 \cdot 4H_2O$
Thermal insulation	<ul style="list-style-type: none"> The expanded vermiculite insulations maintains its capacity from 200 °C and 1200 °C. Its thermal conductivity is of 0.053m Kcallhr. °C for an average temperature of 20 °C.Su calorffica capacity is very low (0.2). The bright walls of the vermiculite mica flakes are a multitude of screens that reflect and disperse the heat energy transmitted by radiation, and make such the insulating material suitable for high temperatures.
Properties (Lightness)	<ul style="list-style-type: none"> The bulk densities of expanded vermiculite ranging between 60 and 140 Kglm 3 as grain size
Stability	<ul style="list-style-type: none"> Is insensitive to atmospheric agents Is inert.
Fire resistance	<ul style="list-style-type: none"> Melting point 1370 °C Softening 1.250 °C stable at high temperatures



Mixture Ratios

Correct proportions for Roof Screed	<ul style="list-style-type: none"> • 2 x 8kg bag medium vermiculite • 1 x 50kg bag Portland cement • Approx 40 l water • Topping (6:1) sand: cement (10-15mm thick)
Quantities required per cubic meter	<ul style="list-style-type: none"> • 15 x 8kg bags medium grade vermiculite • 7 x 50 kg bags Portland cement • Approx 280-300 l water
To calculate volume	<ul style="list-style-type: none"> • VOLUME = LENGTH X BREDTH X HEIGHT V = L x B x H <p>Example.....</p> <p>V= 20m (L) X 10m (B) x 50mm (H) V= 20m x 10m x 0.05m V= 10m³</p>
Properties of the screed	<ul style="list-style-type: none"> • Dry density 450 – 510 kg/m³ • Thermal Conductivity K = 0,120 w/m °C • Compressive Strength Typically 0.5 MPa