



Innogyps

7 Innovation Drive, Unit 122
Flamborough, Ontario, Canada L9H 7H9
Phone: (905) 690-6161
info@innogyps.com

Stucco / Plaster Analysis Package

This analysis package is designed to provide a full detailed survey of the quality of a calcined gypsum product from the standpoints of chemical composition with targeted determination of non-gypsum impurities, slurry fluidity and the effect of mechanical disintegration, mill grind, rehydration response to set acceleration and compressive strength performance.

Stucco Test	Result
Gypsum phase analysis (gravimetric)	% free water/soluble anhydrite/hemihydrate/gypsum/other (includes overall gypsum purity)
Combined Water (moisture balance)	% free water/combined water
Chloride content (specific ion probe)	ppm Cl ⁻
Powder X-Ray diffraction mineral analysis	% mineral composition as determined from a database of over 34,000 mineral patterns
Whole rock chemical analysis	% composition identifying 45 elements and 10 oxides
Hand mix water demand	mL/100g
Machine mix water demand (slump test)	mL/100g
Blaine surface area	cm ² /g
Particle Size Analysis (laser diffraction)	Volume % distribution for 0.4µm – 1mm in ASTM sieve format
Mechanical disintegration analysis	Particle size analysis of samples at 3 different levels of mechanical mixing
Set curve analysis (as received and with 3 levels of added ball milled accelerator)	several parameters measured including: set time, temperature rise, maximum rate of rise etc.
Vicat set time (as received and with 3 levels of added ball milled accelerator)	minutes:seconds
Cube compressive strength (2", in triplicate)	psi / density

Each analysis package also includes a confidential report on the above findings explaining the significance of the results to a gypsum board plant or plaster operation and recommended next steps.

