

EU Norms (EN 459) Mandatory testing program for Natural Hydraulic Limes

POWDERS					
TEST	NORM	EN459 Values	St Astier Values	Frequency	St.Astier Frequency
Fineness	EN196-6	residue by mass 0.09mm/0.2mm ≤15%/≤5%	5-7%	daily	daily
Free water	EN459-2	NHL2/3.5≤2	<2		
		NHL5≤1	<1	monthly	monthly
Soundness (Expansion)	EN459-2	≤2	<1	once a day	several times per day
Bulk density Kg/dm ³	EN459-2	NHL20.4-0.8	0.56	monthly	each product batch
		NHL3.50.5-0.9	0.61/0.65		
		NHL50.6-1.0	0.66/0.75		

MORTARS (prepared with standard EU sand/ISO 679 @ 1:1 vol. ratio)					
Penetration	EN459-2	>20mm	>20mm	monthly	weekly
		<50mm	<50mm		
Setting time	EN459-2	≥1h/<15h	>3h/<10h	2 per week	2 per week
Air content	EN459-2	≤20	≤20	monthly	monthly
Compressive	EN459-2	28 days		weekly	continuously
Strength		N/mm ²			
NHL2		2 to 7	2 to 3		
NHL3.5		3.5 to 10	3.5 to 6		
NHL5		5 to 15	5 to 9		
SO ₃	EN196-2				
content %		3*	0.45/0.65	monthly	continuously
*up to 7% admissible if soundness is demonstrated at 28 days of water curing					
Available	EN459-2	NHL53%	15-20%	weekly	each product batch
Lime	minimum	NHL3.59%	22-26%		each product batch
	values	NHL215%	50-55%		each product batch

Other tests regularly performed by the St. Astier Research & Development Dept:
CO₂ contents after each burning to regulate slaking, Tensile strength, Elasticity moduli,
Adhesion, Workability (flow table), Whiteness.
For further Guidance, contact your St Astier Distributor.