

# SANS 1083 ASPASA Review Where to from here?



# Pertinent updates to share from ASPASA review

- Request for the inclusion of 22,4 mm/25 mm concrete aggregate.
  - Benefits include improved throughput, improved shrinkage values, improved water demand, improved flexural strengths, optimized concrete mix designs based on improved performance and available historical performance data with various rock types.
- Inclusion of Slag Aggregate for use in concrete
  - Need to define the testing regime.
- Synergy to be established between COTO, SABITA Manual 35 and SANS 1083 so that there is alignment across all applicable design specification.

# Testing frequency requirement for inherent property verification

- Currently, Engineers are requesting test reports that are not older than 3 months.
  - These include petrographics, XRD, PSV, Milled abrasion, Ethylene Glycol durability etc.
- It is proposed that frequencies for these results be included into SANS 1083, once annually is considered representative for inherent property verification.
- Testing costs for inherent quarry rock property verification.
  - For a typical quarry the testing cost is approximately R62 000, if done every 3 months the testing can cost R250 000 annually depending on the products produced.
    - Unsustainable & unnecessary costing given how consistent these results remain for a permanent facility
    - For smaller quarries this is unaffordable.
  - Other basic physical properties are tested daily in-house based on production volumes.
    - Grading & FI
    - ALD

# Additional Aggregate grading proposal for Concrete

Aggregate for Concrete									
	Nominal size of stone (mm)								
Sieve Sizes mm	75,0	50,0	37,5	28,0	25,0/22,4	20,0	14,0	10,0	7,1
75,0	100	100							
50,0	0-50	85-100	100						
37,5	0-25	0-50	85-100	100					
28,0	0-5	0-25	0-50	85-100	100	100			
25,0/22,4		-	-	-	80-100	100			
20,0		0-5	0-25	0-50	55-85	85-100	100		
14,0			0-5	0-25	0-25	0-50	85-100	100	
10,0				0-5	0-7	0-25	0-55	85-100	100
7,1						0-5	0-25	0-55	85-100
5,0							0-5	0-25	0-55
2,0								0-5	0-25
1,0									0-5
0,075	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2

# Where to from here?

- Meeting to be set up between the 2 working groups :
  - ASPASA
  - Bituminous products
- This is to finalise the draft document for submission to SABS.
- Normal process through SABS to then commence which includes an internal review by SABS followed by an external review for public comment.
- The process can normally take 9 months if there are no comments.

