

TABLE Z-3.-LIMITS FOR AIR CONTAMINANTS-MINERAL DUSTS
Final Rule Limits Promulgated by OSHA in 1989 as changed through 1992

SUBSTANCE	mppcf ^a	mg/m ³
SILICA		
<i>CRYSTALLINE</i>		
QUARTZ (Respirable fraction)	$\frac{250^b}{\% \text{SiO}_2 + 5}$	$\frac{10\text{mg/m}^3}{\% \text{SiO}_2 + 2}$
QUARTZ (Total Dust)		$\frac{30\text{mg/m}^3}{\% \text{SiO}_2 + 2}$
CRISTOBALITE: Use ½ the value calculated from the count or mass formulae for quartz		
TRIDYMITE: Use ½ the value calculated from the formulae for quartz		
<i>AMORPHOUS</i> , including natural diatomaceous earth	20	$\frac{80\text{mg/m}^3}{\% \text{SiO}_2}$
SILICATES (less than 1% crystalline silica):		
MICA	20	
SOAPSTONE	20	
TALC (not containing asbestos)	20 ^c	
TALC (containing asbestos). Use asbestos limit.		
TREMOLITE (see 29 CFR 1910.1101)		
PORTLAND CEMENT	50	
GRAPHITE (NATURAL)	15	
COAL DUST		
Respirable fraction less than 5% SiO ₂		2.4 mg/m ^{3e}
Respirable fraction more than 5% SiO ₂		$\frac{10\text{mg/m}^3}{\% \text{SiO}_2 + 2}$
INERT OR NUISANCE DUST ^d		
Respirable fraction	15	5 mg/m ³
Total dust	50	15 mg/m ³

Note –Conversion factors–mppcf×35.3 = million particles per cubic meter = particles per cubic centimeter

a Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques.

b The percentage of crystalline silica in the formula is the amount determined from airborne samples, except in those instances in which other methods have been shown to be applicable.

c Containing less than 1% quartz; if 1% quartz or more, use quartz limit

d All inert or nuisance dusts, whether mineral, inorganic, or organic, not listed specifically by substance name, are covered by the Particulates Not Otherwise Regulated (PNOR) limit in Table Z-1-A.

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e Both concentration and percentage quartz for the application of this limit are to be determined from the fraction passing a size-selector with the following characteristics:

Aerodynamic diameter (unit density sphere)	Percent passing selector
2	90
2.5	75
3.5	50
5.0	25
10.0	0