

HILTI SUBMITTAL PACKAGE OSHA 1926.1153 TABLE 1, SECTIONS vi AND vii

Section vi: rig-mounted core saws or drills

Section vii: handheld and stand-mounted drills (including impact and rotary hammer drills)

Current Hilti handheld and rig-mounted core drills DD EC-1 DD 110

DD 120 DD 150-U DD 160 DD 200 DD 250 DD 350 DD 500

For instructions on how to assemble these systems, please refer to the Hilti North America Youtube page



TABLE 1 REQUIREMENTS

These systems fall under either table 1, section vi: handheld and stand-mounted drills (including impact and rotary hammer drills) or section vii: handheld and stand-mounted drills (including impact and rotary hammer drills). In order to be table 1 compliant, the below requirements must be met:

Section vi

- Use tool equipped with integrated water delivery system that supplies water to cutting surface
- · Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions

OR

Section vii

- Use drill equipped with commercially available shroud or cowling with dust collection system
- · Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions
- Dust collector must provide the air flow recommended by the tool manufacturer, or greater
- Have a filter with 99% or greater efficiency and a filter-cleaning mechanism

Table 1 states that no respirator is required if the above controls are fully and properly implemented.

Equipment / Task	Engineering and work practice control methods	Required respiratory protections and minimum Assigned Protection Factor (APF)	
		≤ 4 hours / shift	> 4 hours / shift
(vi) Rig-mounted core saws or drills	Use tool equipped with integrated water delivery system that supplies water to cutting surface.	None	None
	Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.		
(vii) Handheld and stand-mounted drills (including impact and rotary hammer drills)	Use drill equipped with commercially available shroud or cowling with dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the air flow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. Use a HEPA-filtered vacuum when cleaning holes.		
	When used outdoors	None	None
	When used indoors or in an enclosed area	None	None

Check below to see how your system can be compliant with 1926.1153 Table 1. To verify the generation of your tool, check the rating plate, or call Hilti at 800-879-8000 with your serial number.

Tool name	Accessor	Method of compliance		
DD EC-1 (rig mounted) DD 120 DD 150-U (rig mounted) DD 160 DD 200 DD 250 DD 350 DD 500	DWP 10 (365595) Gardena connector with supplied water (4297)			
DD 110 DD 120 DD 150-U DD 160	Vacuums (can use any) VC 125-6 VC 20-U VC 20-U VC 40-U Any DD-X LM corebit* VC 150-6 X VC 150-6 X VC 150-10 X VC 150-10 XE VC 150-10 XE VC 300-17 X		all table 1	
DD EC-1 handheld DD 110 DD 150-U	DWP 10 (365595) Gardena connector with supplied water (4297)		Exposure assessment	

*Hilti's interpretation is that dust control core bits with a vacuum are categorized under table 1 section vii: handheld and stand-mounted drills (including impact and rotary hammer drills).



SYSTEM OVERVIEW

Core drills from Hilti comply either through use of a water delivery system or a shrouded core bit hooked up to a Hilti vacuum. Hilti currently offers the below systems with this configuration:



Note: previous generations of tools may have different item numbers or nomenclature. Check with your local Hilti representative or product instruction manual to verify. Table 1 does not address handheld core drills being used wet. For this reason, the only way to comply with handheld wet core drilling is to utilize objective data or exposure assessment procedures.

Core Drill Submittal



* Table 1 does not address handheld core drills being used wet. For this reason, the only way to comply with handheld wet core drilling is to utilize objective data or exposure assessment procedures.

supplied water attached to Hilti tool

** Hilti interprets dust control coring systems as being in table 1, section vii "handheld and stand mounted drills (including impact and rotary hammers)



CORING — WET

DIA Dust Control – OSHA

Hilti developed diamond coring systems are equipped with a water connection which is to be attached to a pressurized water source. When rig-mounted, these systems are compliant with OSHA 1926.1153, Table 1.

Set-up

- 1. If required, attach the drill stand to the drilling surface using the appropriate anchoring accessories.
- 2. Attach the water source to the tool.
- 3. Insert the bit and ensure its tightened by turning the chuck to the closed position.
- 4. Turn on the water.
- 5. Verify you have the appropriate amount of water for the application. Verify the water delivery system operates properly with no leaks, delivering water freely inside the bit.
 - See instructions for core machines.

Drilling

- 1. Start the water before beginning to drill.
- 2. Begin drilling, applying the required amount of pressure.
- 3. Adjust water flow rate to minimize visible dust.

Cleaning and maintenance

• See instructions for core rigs.

Clean-up of slurry before it dries can help minimize secondary exposure. Ensure that cleanup and disposal of concrete slurry is done in accordance with relevant state/local regulations.

CORING — DRY CORING

DIA Dust Control – OSHA

Hilti developed dry diamond core drills and bits to be attached to a Hilti vacuum with a filter cleaning mechanism and 99% filter efficiency. Hilti considers these coring applications to fit in, and be in compliance with, OSHA 1926.1153, Table 1, (vii) handheld and stand-mounted drills (including impact and rotary hammer drills).

Set-up

- 1. If using as rig-mounted, attach the drill stand to the drilling surface using the appropriate anchoring accessories.
- 2. Attach the vacuum hose to the drill's vacuum hose connector.
- 3. Insert the bit and ensure its tightened by turning the chuck to the closed position.
- 4. Start vacuum.
- 5. Verify proper operation of the dust collection system, including suction at the end of the bit.
 - Check for damage or leaks in the vacuum, hose, and hose connector.
 - See instructions for vacuum.

Drilling

- 1. Start the vacuum before beginning to drill.
- 2. Begin drilling, applying the required amount of pressure.
- 3. To maximize dust collection, after the hole is drilled, slowly withdraw bit from the hole, and keep the drill and vacuum running until the bit is fully withdrawn.

Cleaning and maintenance

• See instructions for vacuum.