HGD SERIES COMMERCIAL KITCHEN EXHAUST SYSTEMS

Grease Ducts, Exhaust Systems for Pizza Ovens, Dishwashers, BBQ Ovens and Industrial Cooking Appliances





ENABLING WELLBEING Form#: BR-021 HGD Series Grease Ducts

SINGLE AND DOUBLE-WALL KITCHEN EXHAUST SYSTEMS

The Halton HGD SERIES Commercial Kitchen Exhaust Systems are the perfect solutions when ease of assembly, overall time invested, price and delivery time are of utmost importance.

Halton is the leader in UL Listed Factory-Built Grease Duct systems. Our weld-free sealing systems are UL evaluated and tested in various ways, including:

- > 500°F continuous internal temperature
- > 2000°F for 30 minutes to simulate a grease fire
- > Leakage test involving burning refined pork lard
- > Leakage test filled with water
- > 90" W.C. of pressure testing
- > Support, Impact, Load, and Volume testing





HSWGD Ø6"-Ø16"

HSWGD Ø18"-Ø36"

Halton's grease ducts come in single-wall, double-wall reduced clearance, and double-wall zero clearance options:

- > Single-wall, Model HSWGD
- Double-wall Reduced Clearance, Model HDWGD+1
- Double-wall Zero Clearance, Model HDWGD-ZC





HDWGD +1



Double-Wall Reduced Clearance Kitchen Exhaust Systems

These models are stainless steel and factory insulated Grease Duct for use in commercial kitchen exhaust systems. They are UL Listed and designed for use with all fuels; gas, oil, and solid fuels including wood. They are also ideal for exhausting pizza ovens and coffee roasters.

• UL 1978 Standard, Grease Duct (ULC S662 Standard for Factory-Built Grease Ducts)

Double-wall Reduced Clearance is ideal for single story buildings where the vent does not penetrate a fire-rated shaft assembly. For example, a 14" O.D. pipe can easily pass through a space between beams that are 24 inches apart and have adequate clearance.

The special Double-wall Zero Clearance model utilizes 3.25" of a special higher density ceramic fiber insulation between the inner liner and outer jacket. The Zero Clearance model is also a two-hour fire-rated-resistant enclosure/duct assembly.



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SINGLE AND DOUBLE-WALL KITCHEN EXHAUST SYSTEMS

Single-Wall Kitchen

Exhaust Systems:

Model HSWGD

HSWGD = Grease Duct UL 1978 Labeled only (uses standard stainless steel alloy)

Halton's Single-wall kitchen exhaust systems are a direct replacement for field-welded steel. Eliminating the welding process on-site dramatically reduces labor and saves time. The installed single-wall grease duct system can then be field wrapped with insulation for reduced or zero clearance per NFPA 96.

Stock Kits are designed to achieve short SKU parts lists that can be used for almost any commercial kitchen hood exhaust. They consist of a Base Kit which contains the basic elements needed to install a system from the hood to a fan. These are boxed on a pallet and used as a base. Then additional lengths and items are boxed on top as needed for each order and quickly shipped.

These Single-wall systems also make an ideal dishwasher exhaust or any other replacement for welded single-wall.

• UL 1978 Standard, Grease Duct

Stock Kit-Example

Base Kit

- KL-Paste, assembly Paste for easiest connections
- KLC, KL Clamp for assembly without pushing/ tapping
- NWHA, No Weld Hood Adapter
- LSB, Light Support Band
- 18CL, 18" field Cutable Length
- 30CL, 30" field Cutable Length
- FPE: 36x36, Fan Plate with 36"x36" field cutable plate

Additional Items

Any Item above, plus

- 12L, 12" Length
- 24L, 24" Length
- 36L, 36" Length
- 48L, 48" Length
- 45EA, 45-degree Elbow with Access
- 87EA, 87-degree Elbow with Access
- IAD, Inline Access Door



















DOUBLE-WALL ZERO CLEARANCE AND FIRE-RATED DUCT ASSEMBLY

Model HDWGD-ZC

The ZC models are all stainless steel and factory insulated Grease Duct for use in commercial kitchen exhaust systems which meet the requirements set forth by Underwriters Laboratories for the UL 2221 Standard. They are heavily insulated for zero clearance-to-combustibles and a two-hour fire-rated shaft assembly. Special through-wall fire penetrations are used when passing through a fire-rated wall or shaft.



HDWGD-ZC

- UL 2221 Standard, Fire Resistive Grease Duct Enclosure Assemblies
- UL 1978 Standard, Grease Duct (ULC S662 Standard for Factory-Built Grease Ducts)
- 90" W.C. Pressure Listing for all applications



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DOUBLE-WALL ZERO CLEARANCE AND FIRE-RATED DUCT ASSEMBLY

UL 2221 Testing

Halton's Model ZC is listed to UL 1978 and UL 2221 Standards. These standards require an Internal Fire Test where flue gasses entering the duct are elevated to 2,000° F for 30 minutes. During this time the temperature on the exterior of the duct is measured and must not exceed a specified temperature threshold.

Additionally UL 2221 requires an External Fire test to simulate the duct engulfed in a building fire. The test requires the duct to be located in an oven for 2 hours with temperatures up to 2,000°F. The system must maintain its integrity and the duct section passing through the firestop must not exceed specified temperatures. Immediately after the fire exposure, the duct is quenched with a fire hose spray causing a thermal shock. The duct must maintain its integrity and also prevent the water stream from passing through the firestop.

The result is a Code approved two-hour fire rated enclosure, Halton HDWGD-ZC shown after multiple 30 minute exposures at 2000°F.

Rectangular black steel fails UL Test

For comparison, Halton subjected a rectangular 16 gauge welded-steel duct with two layers of fire wrap insulation to the same internal fire test. After three minutes, the rectangular duct collapsed and the test was stopped.

After multiple 30 minute exposures at 2000°F



Before



After





ABOUT US

Halton Group is the global technology leader in indoor air solutions for demanding spaces. The company develops and provides solutions for commercial and public premises, healthcare institutions and laboratories, professional kitchens and restaurants as well as energy production environments and marine vessels. Halton's mission is to provide its end-users with safe, comfortable and productive indoor environments that are energyefficient and comply with sustainable principles.

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