

NOZZLE PLACEMENT REQUIREMENTS (Continued)

Nozzle Application Chart

The following chart has been developed to assist in calculating the quantity and type of nozzle required to protect each duct, plenum, or appliance.

NOTICE

This chart is for general reference only. See complete details for each type of hazard.

Hazard	Maximum Hazard Dimensions	Nozzle Quantity	Nozzle Heights	Nozzle Part No.	Nozzle Tip Stamping – Flow No.
Duct or Transition (Single Nozzle)	Length – Unlimited Perimeter – 27 in. (67 cm) Diameter – 8.5 in. (22 cm)	1	–	419336	1W
Duct or Transition (Single Nozzle)	Length – Unlimited Perimeter – 75 in. (190.5 cm) Diameter – 24 in. (61 cm)	1	–	419337/78078*	2W/2WH*
Duct or Transition (Dual Nozzle)	Length – Unlimited Perimeter – 150 in. (381 cm) Diameter – 48 in. (122 cm)	2	–	419337/78078*	2W/2WH*
Electrostatic Precipitator (At Base of Duct)	Individual Cell	1	–	419334	1/2N
Plenum (Horizontal Protection)	Length – 8 ft. (2.4 m) Filter Height – 20 in. (51 cm)	1	–	419335/417332	1N/1NSS
Plenum (Vertical Protection)	Length – 4 ft. (1.2 m) Width – 4 ft. (1.2 m)	1	–	419336/417333	1W/1WSS
▶ Fryer/Split Vat Fryer**	Maximum Size (without drip board) 15 in. (38 cm) x 14 in. (36 cm)				
	High Proximity	1	27 – 47 in.	419339	230
	Medium Proximity	1	20 – 27 in.	419340	245
	Maximum Size (without drip board) 19 1/2 in. (49.5 cm) x 19 in. (48.2 cm)				
	High Proximity	1	21 – 34 in.	419338	3N
	Low Proximity	1	13 – 16 in.	419342	290
	Maximum Size (without drip board) 18 in. (45.7 cm) x 18 in. (45.7 cm)				
	High Proximity	1	25 – 35 in. (64-89 cm)	419338	3N

* Use 2WH nozzle on 1.5 gallon, 6 flow, duct and plenum protection only.

▶ ** For multiple nozzle protection of single fryers, see detailed information on Pages 4-12 through 4-14.

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Hazard	Maximum Hazard Dimensions	Nozzle Quantity	Nozzle Heights	Nozzle Part No.	Nozzle Tip Stamping – Flow No.
▶ Fryer/Split Vat Fryer**	Maximum Size (with drip board) 21 in. (53 cm) x 14 in. (36 cm) (Fry Pot must not exceed 15 in. x 14 in. (38 cm x 36 cm))				
	High Proximity	1	27 – 47 in.	419339	230
	Medium Proximity	1	20 – 27 in.	419340	245
	Maximum Size (with drip board) 25 3/8 in. (64.4 cm) x 19 1/2 in. (49.5 cm) (Fry pot side must not exceed 19 1/2 in. (49.5 cm) x 19 in. (48.2 cm))				
	High Proximity	1	21 – 34 in.	419338	3N
	Low Proximity	1	13 – 16 in.	419342	290
	Maximum Size (with drip board) 18 in. (45.7 cm) x 27 5/8 in. (70.2 cm)				
	High Proximity	1	25 – 35 in. (64-89 cm)	419338	3N
	Longest Side 28 in. (71 cm) Area – 336 sq. in. (2168 sq. cm)	1	30 – 50 in. (76 – 127 cm) 40 – 48 in. (102 – 122 cm) (With Backshelf)	419333	1F
	Longest Side (High Proximity) 28 in. (71 cm) Area – 672 sq. in. (4335 sq. cm)	1	40 – 50 in. (102 – 127 cm)	419340	245
Range	Longest Side (Medium Proximity) 28 in. (71 cm) Area – 672 sq. in. (4335 sq. cm)	1	30 – 40 in. (76 – 102 cm)	419341	260
	Longest Side (Low Proximity) 36 in. (91 cm) Area – 1008 sq. in. (6503 sq. cm)	2	15 – 20 in. (38 – 51 cm)	419342	290

SECTION IV – SYSTEM DESIGN

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NOZZLE PLACEMENT REQUIREMENTS (Continued)

Nozzle Application Chart (Continued)

<u>Hazard</u>	<u>Maximum Hazard Dimensions</u>	<u>Nozzle Quantity</u>	<u>Nozzle Heights</u>	<u>Nozzle Part No.</u>	<u>Nozzle Tip Stamping – Flow No.</u>
Griddle	Longest Side (High Proximity) 48 in. (122 cm) Area – 1440 sq. in. (9290 sq. cm)	1	30 – 50 in. (76 – 127 cm) (perimeter located)	419341	260
	Longest Side (High Proximity) 30 in. (76 cm) Area – 720 sq. in. (1829 sq. cm)	1	30 – 50 in. (76 – 127 cm) (center located)	419342	290
	Longest Side (High Proximity) 36 in. (91 cm) Area – 1080 sq. in. (2743 sq. cm)	1	35 – 40 in. (89 – 102 cm) (perimeter located)	419335/417332	1N/1NSS
	Longest Side (Medium Proximity) 48 in. (122 cm) Area – 1440 sq. in. (9190 sq. cm)	1	20 – 30 in. (51 – 76 cm) (perimeter located)	419342	290
	Longest Side (Low Proximity) 48 in. (122 cm) Area – 1440 sq. in. (9290 sq. cm)	1	10 – 20 in. (25 – 51 cm) (perimeter located)	419343	2120
Chain Broiler* (Overhead Protection)	Longest Side – 34 in. (86 cm) Area – 1088 sq. in. (7019 sq. cm)	2	10 – 26 in. (25 – 66 cm)	419336/417333	1W/1WSS
Chain Broiler (Horizontal Protection)	Length – 43 in. (109 cm) Width – 31 in. (79 cm)	2	1 – 3 in. (3 – 8 cm)	419335/417332	1N/1NSS
Gas-Radiant Char-Broiler	Longest Side – 24 in. (61 cm) Area – 528 sq. in. (3406 sq. cm)	1	18 – 40 in. (46 – 102 cm)	419340	245
	Longest Side – 24 in. (61 cm) Area – 528 sq. in. (3406 sq. m)	1	26 – 40 in. (66 – 102 cm)	419335/417332	1N/1NSS
Electric Char-Broiler	Longest Side – 34 in. (86 cm) Area – 680 sq. in. (4388 sq. cm)	1	20 – 50 in. (51 – 127 cm)	419335/417332	1N/1NSS
Lava-Rock Broiler	Longest Side – 24 in. (61 cm) Area – 312 sq. in. (2013 sq. cm)	1	18 – 35 in. (46 – 89 cm)	419335/417332	1N/1NSS
Natural Charcoal Broiler	Longest Side – 24 in. (61 cm) Area – 288 sq. in. (1858 sq. cm)	1	18 – 40 in. (46 – 102 cm)	419335/417332	1N/1NSS
Lava-Rock or Natural Charcoal Char-Broiler	Longest Side – 30 in. (76 cm) Area – 720 sq. in. (4645 sq. cm)	1	14 – 40 in. (36 – 102 cm)	419338	3N

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<u>Hazard</u>	<u>Maximum Hazard Dimensions</u>	<u>Nozzle Quantity</u>	<u>Nozzle Heights</u>	<u>Nozzle Part No.</u>	<u>Nozzle Tip Stamping – Flow No.</u>
Mesquite Char-Broiler	Longest Side – 30 in. (76 cm) Area – 720 sq. in. (4645 sq. cm)	1	14 – 40 in. (36 – 102 cm)	419338	3N
Upright Broiler	Length – 32.5 in. (82.5 cm) Width – 30 in. (76 cm)	2	–	419334	1/2N
Salamander Broiler	Length – 32.5 in. (82.5 cm) Width – 30 in. (76 cm)	2	–	419334	1/2N
Wok	14 in. – 30 in. (36 – 76 cm) Diameter 3.75 – 8.0 in. (9.5 – 20 cm) Deep	1	35 – 45 in. (89 – 114 cm)	419341	260
	11 in. – 18 in. (28 – 46 cm) Diameter 3.0 – 5.0 in. (7.6 – 13 cm) Deep	1	35 – 40 in. (89 – 102 cm)	419335/417332	1N/1NSS
	11 in. – 24 in. (28 – 61 cm) Diameter 3.0 – 6.0 in. (8 – 15.2 cm) Deep		35 in. (89 cm)	419335/417332	1N/1NSS