

## Duct Diameter Sizing Charts

The following is needed to determine the duct diameter: CFM and Velocity (CFM / V = AREA). Charts listed below show what duct diameter to use given a CFM and Velocity. Title information for each block identifies the name of the fan(s), the curb size and the duct transition part number(s) needed to transition from the listed duct to the curb. Duct is sized to the fan inlet and curb, under-sizing or over-sizing duct will cause system effect and or interfere with the curb. Transition plates are oversized to allow for slight misalignments in duct, transition plates are cut to size in the field. **Note: the yellow highlighted area in each chart identifies the specific duct diameter(s) to be used per the charts titled fan.**

<b>DU12HFA - Curb 17 1/2" - Transition Plates DW1710TP &amp; DW1712TP</b>							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
500	10	10	10	8	8	8	8
600	10	10	10	10	10	10	8
700	12	10	10	10	10	10	10
800	12	12	12	10	10	10	10
900	12	12	12	12	12	10	10
1000	14	12	12	12	12	12	12
1100	14	14	14	12	12	12	12
1200	14	14	14	14	12	12	12
1300	16	14	14	14	14	12	12
1400	16	16	14	14	14	14	12

<b>NCA08FA – NCA10FA - DU25HFA, DU30HFA, DU33HFA, DU50HFA - Curb 19 1/2" - Transition Plates DW1912TP &amp; DW1914TP</b>							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
700	12	10	10	10	10	10	10
800	12	12	12	10	10	10	10
900	12	12	12	12	12	10	10
1000	14	12	12	12	12	12	12
1100	14	14	14	12	12	12	12
1200	14	14	14	14	12	12	12
1300	16	14	14	14	14	12	12
1400	16	16	14	14	14	14	12
1500	16	16	16	14	14	14	14
1600	16	16	16	14	14	14	14
1700	18	16	16	16	14	14	14
1800	18	16	16	16	16	14	14
1900	18	18	16	16	16	16	14

## Duct Diameter Sizing Chart

NCA14FA - NCA14HPFA - DU75HFA - DU85HFA - Curb 23" - Transition Plates DW2314TP, DW2316TP & DW2318TP							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
1000	14	12	12	12	12	12	12
1100	14	14	14	12	12	12	12
1200	14	14	14	14	12	12	12
1300	16	14	14	14	14	12	12
1400	16	16	14	14	14	14	12
1500	16	16	16	14	14	14	14
1600	16	16	16	14	14	14	14
1700	18	16	16	16	14	14	14
1800	18	16	16	16	16	14	14
1900	18	18	16	16	16	16	14
2000	18	18	18	16	16	16	16
2100	18	18	18	18	16	16	16
2200	20	18	18	18	16	16	16
2300	20	20	18	18	18	16	16
2400	20	20	18	18	18	18	16
2500	20	20	20	18	18	18	16
2600	20	20	20	18	18	18	18
2700	24	20	20	20	18	18	18
2800	24	20	20	20	18	18	18
2900	24	24	20	20	20	18	18
3000	24	24	20	20	20	18	18
3100	24	24	24	20	20	20	18

## Duct Diameter Sizing Chart

<b>NCA16FA - NCA16HPFA – NCA18FA – NCA18HPFA - Curb 26 1/2" - Transition Plates DW2616TP, DW2618TP &amp; DW2620TP</b>							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
1300	16	14	14	14	14	12	12
1400	16	16	14	14	14	14	12
1500	16	16	16	14	14	14	14
1600	16	16	16	14	14	14	14
1700	18	16	16	16	14	14	14
1800	18	16	16	16	16	14	14
1900	18	18	16	16	16	16	14
2000	18	18	18	16	16	16	16
2100	18	18	18	18	16	16	16
2200	20	18	18	18	16	16	16
2300	20	20	18	18	18	16	16
2400	20	20	18	18	18	18	16
2500	20	20	20	18	18	18	16
2600	20	20	20	18	18	18	18
2700	24	20	20	20	18	18	18
2800	24	20	20	20	18	18	18
2900	24	24	20	20	20	18	18
3000	24	24	20	20	20	18	18
3100	24	24	24	20	20	20	18
3200	24	24	24	20	20	20	20
3300	24	24	24	24	20	20	20
3400	24	24	24	24	20	20	20
3500	24	24	24	24	24	20	20
3600	24	24	24	24	24	20	20
3700	24	24	24	24	24	20	20
3800	N/A	24	24	24	24	24	20
3900	N/A	24	24	24	24	24	20

## Duct Diameter Sizing Chart

NCA24FA - NCA24HPFA - Curb 31 1/2" - Transition Plate DW3124TP							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
2700	24	20	20	20	18	18	18
2800	24	20	20	20	18	18	18
2900	24	24	20	20	20	18	18
3000	24	24	20	20	20	18	18
3100	24	24	24	20	20	20	18
3200	24	24	24	20	20	20	20
3300	24	24	24	24	20	20	20
3400	24	24	24	24	20	20	20
3500	24	24	24	24	24	20	20
3600	24	24	24	24	24	20	20
3700	24	24	24	24	24	20	20
3800	N/A	24	24	24	24	24	20
3900	N/A	24	24	24	24	24	20
4000	N/A	24	24	24	24	24	24
4100	N/A	N/A	24	24	24	24	24
4200	N/A	N/A	24	24	24	24	24
4300	N/A	N/A	24	24	24	24	24
4400	N/A	N/A	N/A	24	24	24	24
4500	N/A	N/A	N/A	24	24	24	24
4600	N/A	N/A	N/A	24	24	24	24
4700	N/A	N/A	N/A	24	24	24	24
4800	N/A	N/A	N/A	N/A	24	24	24
4900	N/A	N/A	N/A	N/A	24	24	24
5000	N/A	N/A	N/A	N/A	24	24	24
5100	N/A	N/A	N/A	N/A	N/A	24	24
5200	N/A	N/A	N/A	N/A	N/A	24	24
5300	N/A	N/A	N/A	N/A	N/A	24	24
5400	N/A	N/A	N/A	N/A	N/A	N/A	24
5500	N/A	N/A	N/A	N/A	N/A	N/A	24
5600	N/A	N/A	N/A	N/A	N/A	N/A	24

## Duct Diameter Sizing Chart

NCA30FA - NCA30HPFA - Curb 38 1/2" - Transition Plate DW3824TP							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
2700	24	20	20	20	18	18	18
2800	24	20	20	20	18	18	18
2900	24	24	20	20	20	18	18
3000	24	24	20	20	20	18	18
3100	24	24	24	20	20	20	18
3200	24	24	24	20	20	20	20
3300	24	24	24	24	20	20	20
3400	24	24	24	24	20	20	20
3500	24	24	24	24	24	20	20
3600	24	24	24	24	24	20	20
3700	24	24	24	24	24	20	20
3800	N/A	24	24	24	24	24	20
3900	N/A	24	24	24	24	24	20
4000	N/A	24	24	24	24	24	24
4100	N/A	N/A	24	24	24	24	24
4200	N/A	N/A	24	24	24	24	24
4300	N/A	N/A	24	24	24	24	24
4400	N/A	N/A	N/A	24	24	24	24
4500	N/A	N/A	N/A	24	24	24	24
4600	N/A	N/A	N/A	24	24	24	24
4700	N/A	N/A	N/A	24	24	24	24
4800	N/A	N/A	N/A	N/A	24	24	24
4900	N/A	N/A	N/A	N/A	24	24	24
5000	N/A	N/A	N/A	N/A	24	24	24
5100	N/A	N/A	N/A	N/A	N/A	24	24
5200	N/A	N/A	N/A	N/A	N/A	24	24
5300	N/A	N/A	N/A	N/A	N/A	24	24
5400	N/A	N/A	N/A	N/A	N/A	N/A	24
5500	N/A	N/A	N/A	N/A	N/A	N/A	24
5600	N/A	N/A	N/A	N/A	N/A	N/A	24

## Duct Diameter Sizing Charts

<b>HRE13 - Curb 20 1/2" - Transition Plate DW1914TP &amp; DW1916TP</b>							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
1000	14	12	12	12	12	12	12
1100	14	14	14	12	12	12	12
1200	14	14	14	14	12	12	12
1300	16	14	14	14	14	12	12
1400	16	16	14	14	14	14	12
1500	16	16	16	14	14	14	14
1600	16	16	16	14	14	14	14
1700	18	16	16	16	14	14	14
1800	18	16	16	16	16	14	14
1900	18	18	16	16	16	16	14
2000	18	18	18	16	16	16	16
2100	18	18	18	18	16	16	16
2200	20	18	18	18	16	16	16
2300	20	20	18	18	18	16	16
2400	20	20	18	18	18	18	16
2500	20	20	20	18	18	18	16

<b>HRE16 - Curb 24 1/2" - Transition Plate DW2318TP &amp; DW2620TP</b>							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
1700	18	16	16	16	14	14	14
1800	18	16	16	16	16	14	14
1900	18	18	16	16	16	16	14
2000	18	18	18	16	16	16	16
2100	18	18	18	18	16	16	16
2200	20	18	18	18	16	16	16
2300	20	20	18	18	18	16	16
2400	20	20	18	18	18	18	16
2500	20	20	20	18	18	18	16
2600	20	20	20	18	18	18	18
2700	24	20	20	20	18	18	18
2800	24	20	20	20	18	18	18
2900	24	24	20	20	20	18	18
3000	24	24	20	20	20	18	18
3100	24	24	24	20	20	20	18
3200	24	24	24	20	20	20	20
3300	24	24	24	24	20	20	20
3400	24	24	24	24	20	20	20
3500	24	24	24	24	24	20	20
3600	24	24	24	24	24	20	20
3700	24	24	24	24	24	20	20
3800	N/A	24	24	24	24	24	20

3900	N/A	24	24	24	24	24	20
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## Duct Diameter Sizing Chart

HRE20 - Curb 28 1/2" - Transition Plate DW2620TP & DW3124TP							
CFM	Velocity						
	1200	1300	1400	1500	1600	1700	1800
2200	20	18	18	18	16	16	16
2300	20	20	18	18	18	16	16
2400	20	20	18	18	18	18	16
2500	20	20	20	18	18	18	16
2600	20	20	20	18	18	18	18
2700	24	20	20	20	18	18	18
2800	24	20	20	20	18	18	18
2900	24	24	20	20	20	18	18
3000	24	24	20	20	20	18	18
3100	24	24	24	20	20	20	18
3200	24	24	24	20	20	20	20
3300	24	24	24	24	20	20	20
3400	24	24	24	24	20	20	20
3500	24	24	24	24	24	20	20
3600	24	24	24	24	24	20	20
3700	24	24	24	24	24	20	20
3800	N/A	24	24	24	24	24	20
3900	N/A	24	24	24	24	24	20
4000	N/A	24	24	24	24	24	24
4100	N/A	N/A	24	24	24	24	24
4200	N/A	N/A	24	24	24	24	24
4300	N/A	N/A	24	24	24	24	24
4400	N/A	N/A	N/A	24	24	24	24
4500	N/A	N/A	N/A	24	24	24	24
4600	N/A	N/A	N/A	24	24	24	24
4700	N/A	N/A	N/A	24	24	24	24
4800	N/A	N/A	N/A	N/A	24	24	24
4900	N/A	N/A	N/A	N/A	24	24	24
5000	N/A	N/A	N/A	N/A	24	24	24
5100	N/A	N/A	N/A	N/A	N/A	24	24
5200	N/A	N/A	N/A	N/A	N/A	24	24
5300	N/A	N/A	N/A	N/A	N/A	24	24
5400	N/A	N/A	N/A	N/A	N/A	N/A	24
5500	N/A	N/A	N/A	N/A	N/A	N/A	24
5600	N/A	N/A	N/A	N/A	N/A	N/A	24

## Duct Diameter Sizing Chart

<b>HRE24 - Curb 32 1/2" - Transition Plate DW3124TP</b>							
	Velocity						
CFM	1200	1300	1400	1500	1600	1700	1800
2700	24	20	20	20	18	18	18
2800	24	20	20	20	18	18	18
2900	24	24	20	20	20	18	18
3000	24	24	20	20	20	18	18
3100	24	24	24	20	20	20	18
3200	24	24	24	20	20	20	20
3300	24	24	24	24	20	20	20
3400	24	24	24	24	20	20	20
3500	24	24	24	24	24	20	20
3600	24	24	24	24	24	20	20
3700	24	24	24	24	24	20	20
3800	N/A	24	24	24	24	24	20
3900	N/A	24	24	24	24	24	20
4000	N/A	24	24	24	24	24	24
4100	N/A	N/A	24	24	24	24	24
4200	N/A	N/A	24	24	24	24	24
4300	N/A	N/A	24	24	24	24	24
4400	N/A	N/A	N/A	24	24	24	24
4500	N/A	N/A	N/A	24	24	24	24
4600	N/A	N/A	N/A	24	24	24	24
4700	N/A	N/A	N/A	24	24	24	24
4800	N/A	N/A	N/A	N/A	24	24	24
4900	N/A	N/A	N/A	N/A	24	24	24
5000	N/A	N/A	N/A	N/A	24	24	24
5100	N/A	N/A	N/A	N/A	N/A	24	24
5200	N/A	N/A	N/A	N/A	N/A	24	24
5300	N/A	N/A	N/A	N/A	N/A	24	24
5400	N/A	N/A	N/A	N/A	N/A	N/A	24
5500	N/A	N/A	N/A	N/A	N/A	N/A	24
5600	N/A	N/A	N/A	N/A	N/A	N/A	24