



# SRA Submittal



**NAD Klima Ontario**  
2840, Argentia Road, Unit 6, Mississauga (Ont) L5N 8G4  
(416) 860-1067  
ontario@nadklima.com

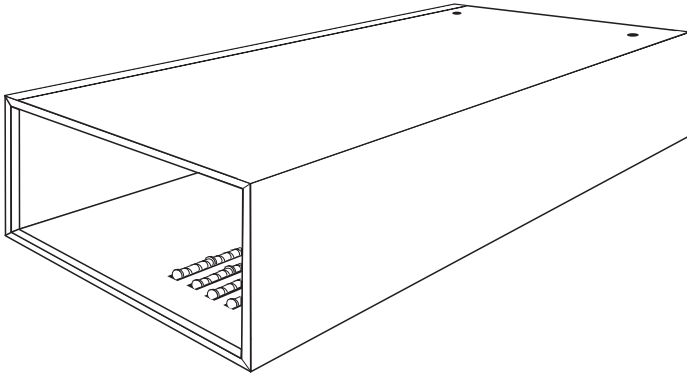
**NAD Klima**  
144 rue Léger, Sherbrooke (Qué) J1L 1L9  
(819) 780-0111 • 1 866 531-1739  
info@nadklima.com

**Date**

**Project**

**Engineer**

**Contractor**



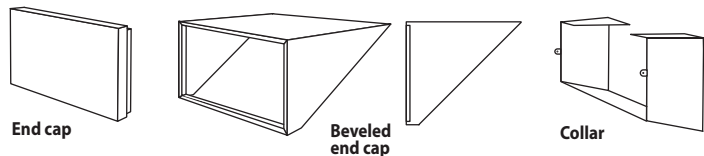
### The diffuser

- Rectangular duct diffuser
- Made of 22 ga brushed steel for duct dimensions inferior to 508 mm (20 in) in diameter, and 20 ga for dimensions superior or equal to 508 mm (20 in).
- Dimensions ranging from 152 mm (6 in) to 1219 mm (48 in) for width and height, and up to 1450 mm (57 in) for length.
- Painted with a TGIC-free polyester powder coat.
- RAL colour chosen by the customer.
- Slots containing ABS eccentric rollers or nozzle rollers
- Les rouleaux ont une longueur de 100 mm.
- 100 mm long eccentric rollers with alphanumerically dial, allowing the adjustment of the air flow.
- Air flow pattern over 180 degrees.
- The nozzles rollers will be opened or closed
- Easy to clean.
- Reducer fitting or a perforated balancing damper installed after 5 consecutive active sections
- SRA duct can be screwed directly to the ceiling.
- Suspension with threaded rod ou rail available.
- Duct diffuser can be passive (without slots).

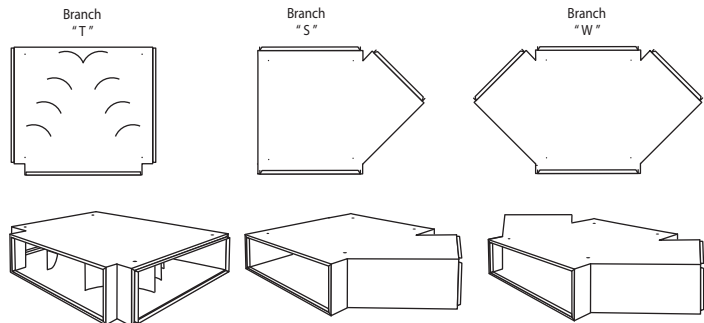
### Accessories

All of the standard accessories (elbows, sleeves, reducers, multi-branch connectors, etc.) are available in the precise dimensions of the ducts.

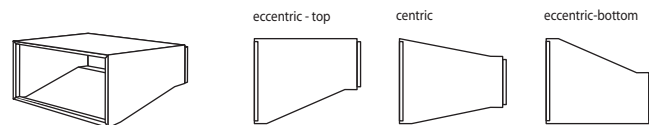
For air balancing reasons, reducers ora balancing damper are requiredbetween multiple sections.



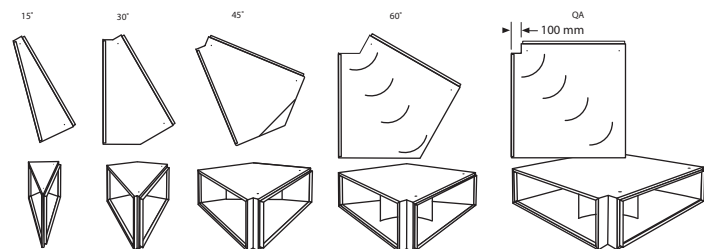
### Branch



### Reducer



### Elbows



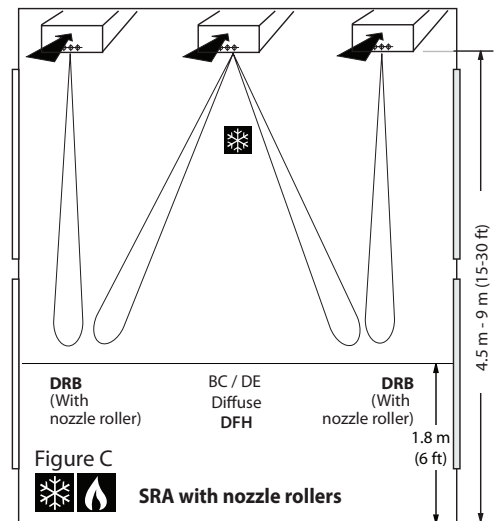
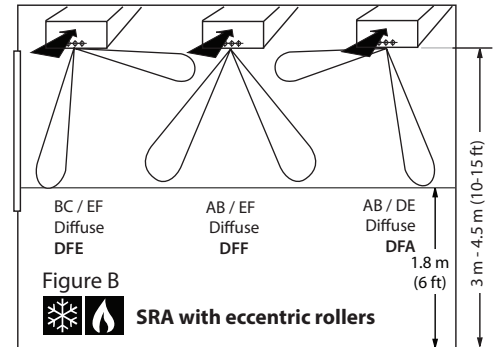
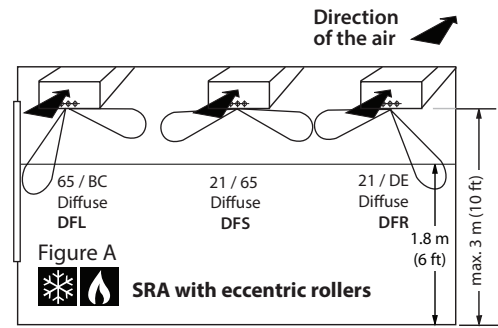
## SRA - Setting of the air jet direction

Thanks to the shape of the eccentric rollers and adjustment dial with alphanumeric characters, air jet's direction at the diffuser's outlet can vary up to 180°. For each direction, there are two (2) roller positions ("reduced" or "not reduced"), as illustrated in figure E.

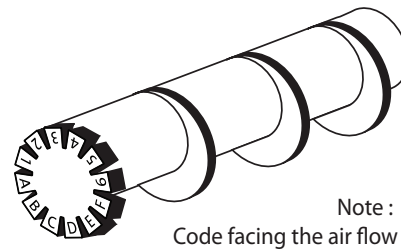
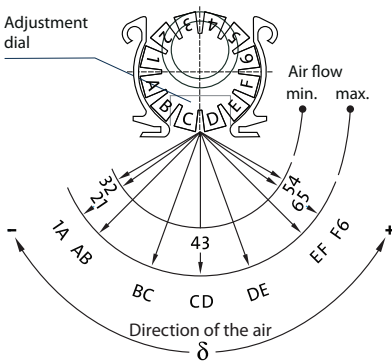
The length of each roller is 100 mm and they are individually adjustable. As a result, the combinations of airflow are almost infinite. In manufacturing, the ducts are individually adjusted for each project. The standard setting for the rollers is set to diffusion mode in positions "21" and "65" alternately. This setting produces strong induction, which can be used to meet heating and cooling needs, thereby creating high mixing levels.

The nozzle rollers can only be set in the open and closed position. As a result, the divergent mode allows of the air jets to blow in more accurate directions.

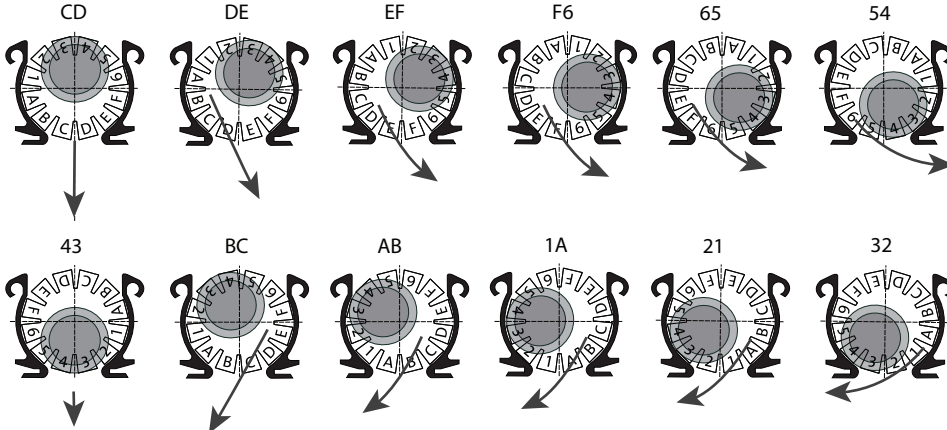
This mode also allows a longer projection of the airflow. In specific zones, which are usually difficult to cover, a specialized setting can be created. Figures C and D show the relationship between the position of the eccentric roller and the direction of exiting airflow. Note that to maximize air projection, multiple jets can be orientated in the same direction to optimize the coverage of a zone, even when heating.



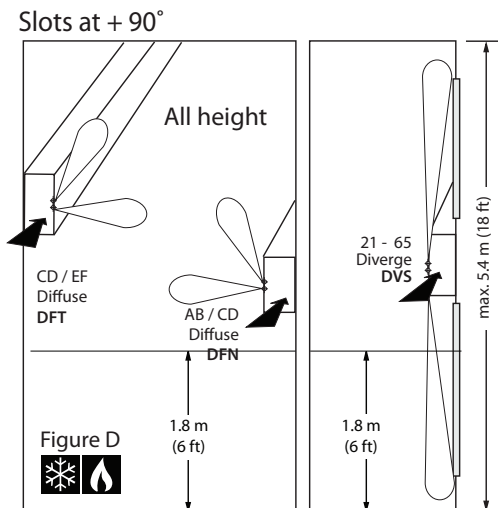
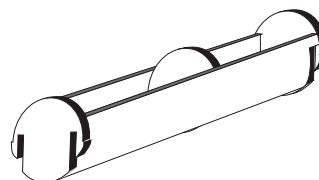
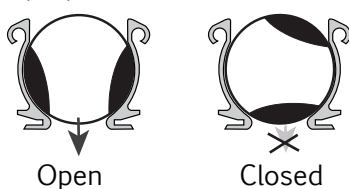
**Eccentric roller** Figure E



**Jet orientation guide**



**Nozzle roller (DRB)**



## SRA - Dimensions

### PCM - Maximum flow

Width in mm	6 152	8 203	10 254	12 305	14 356	16 406	18 457	20 508	22 559	24 610	26 660	28 711	30 762	32 813	34 864	36 914	38 965	40 1016	42 1067	44 1118	46 1168	48 1219	
Height in mm																							
6 152	N/A	70	110	170	170	240	240	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 203	70	170	240	240	320	420	420	540	540	700	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 254	110	240	320	420	540	540	700	850	850	1000	1200	1200	1400	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12 305	170	240	420	540	700	850	1000	1200	1200	1400	1500	1500	1700	1700	1900	1900	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14 356	170	320	540	700	850	1000	1200	1400	1500	1700	1700	1900	2100	2100	2300	2300	2500	2500	2700	N/A	N/A	N/A	N/A
16 406	240	420	540	850	1000	1200	1400	1500	1700	1900	2100	2300	2300	2500	2700	2700	3000	3000	3200	3600	3600	3800	3800
18 457	240	420	700	1000	1200	1400	1500	1900	2100	2100	2300	2500	2700	3000	3000	3200	3600	3600	3800	4000	4000	4400	4400
20 508	N/A	540	850	1200	1400	1500	1900	2100	2300	2500	2700	3000	3000	3200	3600	3800	3800	4000	4400	4400	4800	4800	5000
22 559	N/A	540	850	1200	1500	1700	2100	2300	2500	2700	3000	3200	3600	3800	3800	4000	4400	4800	4800	5000	5400	5400	5400
24 610	N/A	700	1000	1400	1700	1900	2100	2500	2700	3000	3200	3600	3800	4000	4400	4800	5000	5000	5400	5600	6000	6000	6000
26 660	N/A	N/A	1200	1500	1700	2100	2300	2700	3000	3200	3600	3800	4000	4400	4800	5000	5400	5600	6000	6000	6500	6800	6800
28 711	N/A	N/A	1200	1500	1900	2300	2500	3000	3200	3600	3800	4000	4400	5000	5000	5400	5600	6000	6500	6800	7000	7000	7000
30 762	N/A	N/A	1400	1700	2100	2300	2700	3000	3600	3800	4000	4400	5000	5400	5600	6000	6500	6800	6800	7000	7500	8000	8000
32 813	N/A	N/A	N/A	1700	2100	2500	3000	3200	3800	4000	4400	5000	5400	5600	6000	6500	6800	7000	7500	8000	8500	8500	8500
34 864	N/A	N/A	N/A	1900	2300	2700	3000	3600	3800	4400	4800	5000	5600	6000	6500	6800	7000	7500	8000	8500	9000	9400	9400
36 914	N/A	N/A	N/A	1900	2300	2700	3200	3800	4000	4800	5000	5400	6000	6500	6800	7000	7500	8000	8500	9000	9400	9700	9700
38 965	N/A	N/A	N/A	N/A	2500	3000	3600	3800	4400	5000	5400	5600	6500	6800	7000	7500	8000	8500	9000	9400	9700	10700	10700
40 1016	N/A	N/A	N/A	N/A	2500	3000	3600	4000	4800	5000	5600	6000	6800	7000	7500	8000	8500	9400	9700	10700	11000	11000	11100
42 1067	N/A	N/A	N/A	N/A	2700	3200	3800	4400	4800	5400	6000	6500	6800	7500	8000	8500	9000	9700	10700	11000	11100	11600	11600
44 1118	N/A	N/A	N/A	N/A	N/A	3600	4000	4400	5000	5600	6000	6800	7000	8000	8500	9000	9400	10700	11000	11100	11600	12000	12000
46 1168	N/A	N/A	N/A	N/A	N/A	3600	4000	4800	5400	6000	6500	7000	7500	8500	9000	9400	9700	11000	11100	11600	12000	12800	12800
48 1219	N/A	N/A	N/A	N/A	N/A	3800	4400	5000	5400	6000	6800	7000	8000	8500	9400	9700	10700	11100	11600	12000	12800	13000	13000

### Litre / second - Maximum flow

Width in mm	6 152	8 203	10 254	12 305	14 356	16 406	18 457	20 508	22 559	24 610	26 660	28 711	30 762	32 813	34 864	36 914	38 965	40 1016	42 1067	44 1118	46 1168	48 1219	
Height in mm																							
6 152	N/A	33	52	80	80	113	113	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 203	33	80	113	113	151	198	198	255	255	330	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 254	52	113	151	198	255	255	330	401	401	472	566	566	660	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12 305	80	113	198	255	330	401	472	566	566	660	708	708	802	802	896	896	N/A	N/A	N/A	N/A	N/A	N/A	N/A
14 356	80	151	255	330	401	472	566	660	708	802	802	896	991	991	1085	1085	1179	1179	1274	N/A	N/A	N/A	N/A
16 406	113	198	255	401	472	566	660	708	802	896	991	1085	1085	1179	1274	1274	1415	1415	1509	1698	1698	1792	1792
18 457	113	198	330	472	566	660	708	896	991	991	1085	1179	1274	1415	1415	1509	1698	1698	1792	1887	1887	2075	2075
20 508	N/A	255	401	566	660	708	896	991	1085	1179	1274	1415	1415	1509	1698	1792	1792	1887	2075	2075	2264	2358	2358
22 559	N/A	255	401	566	708	802	991	1085	1179	1274	1415	1509	1698	1792	1792	1887	2075	2264	2264	2358	2547	2547	2547
24 610	N/A	330	472	660	802	896	991	1179	1274	1415	1509	1698	1792	1887	2075	2264	2358	2358	2547	2642	2830	2830	2830
26 660	N/A	N/A	566	708	802	991	1085	1274	1415	1509	1698	1792	1887	2075	2264	2358	2547	2642	2830	2830	3066	3208	3208
28 711	N/A	N/A	566	708	896	1085	1179	1415	1509	1698	1792	1887	2075	2358	2358	2547	2642	2830	3066	3208	3302	3302	3302
30 762	N/A	N/A	660	802	991	1085	1274	1415	1698	1792	1887	2075	2358	2547	2642	2830	3066	3208	3208	3302	3538	3774	3774
32 813	N/A	N/A	N/A	802	991	1179	1415	1509	1792	1887	2075	2358	2547	2642	2830	3066	3208	3302	3538	3774	4009	4009	4009
34 864	N/A	N/A	N/A	896	1085	1274	1415	1698	1792	2075	2264	2358	2642	2830	3066	3208	3302	3538	3774	4009	4245	4434	4434
36 914	N/A	N/A	N/A	896	1085	1274	1509	1792	1887	2264	2358	2547	2830	3066	3208	3302	3538	3774	4009	4245	4434	4575	4575
38 965	N/A	N/A	N/A	N/A	1179	1415	1698	1792	2075	2358	2547	2642	3066	3208	3302	3538	3774	4009	4245	4434	4575	5047	5047
40 1016	N/A	N/A	N/A	N/A	1179	1415	1698	1887	2264	2358	2642	2830	3208	3302	3538	3774	4009	4434	4575	5047	5189	5236	5236
42 1067	N/A	N/A	N/A	N/A	1274	1509	1792	2075	2264	2547	2830	3066	3208	3538	3774	4009	4245	4575	5047	5189	5236	5472	5472
44 1118	N/A	N/A	N/A	N/A	N/A	1698	1887	2075	2358	2642	2830	3208	3302	3774	4009	4245	4434	5047	5189	5236	5472	5660	5660
46 1168	N/A	N/A	N/A	N/A	N/A	1698	1887	2264	2547	2830	3066	3302	3538	4009	4245	4434	4575	5189	5236	5472	5660	6038	6038
48 1219	N/A	N/A	N/A	N/A	N/A	1792	2075	2358	2547	2830	3208	3302	3774	4009	4434	4575	5047	5236	5472	5660	6038	6132	6132

# SRA - Codification

<b>SRA</b>	1000 (800), 1450 (1300)										<b>Product</b>			
		0800, 0900, 1000, 1100, 1200, 1300									<b>Length (L<sub>R</sub>)</b>			
			152*, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219								<b>Length of the slots (L<sub>S</sub>)</b>			
				152*, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219							<b>Width (Horizontal measures)</b>			
					XX, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, 14						<b>Height (Vertical measures)</b>			
						003 = Slots at 3h 006 = Slots at 6h 009 = Slots at 9h 036 = Slots at 3h and at 6h	039 = Slots at 3h and at 9h 069 = Slots at 6h and at 9h 369 = Slots at 3h, at 6h and at 9h XXX = Passive				<b>Number of slots</b>			
						XXX = Passive DFS = Diffuse standard 21/ 65 DFR = Diffuse window DE / 21 DFL = Diffuse window BC / 65 DFF = Diffuse height AB / EF DFT = Diffuse CD / EF - slots at 3 h DFN = Diffuses CD / AB - slots at 9 h	DFH = Diffuse height BC / DE DFA = Diffuse AB / DE DVB = Divergent 21 DVD = Divergent 65 DVV = Vertical divergent CD DRB = Divergent with nozzle rollers				<b>Slot position</b>			
						W = White eccentric roller or nozzle roller (RAL 9003) C = Cream eccentric roller (RAL 9010) B = Black eccentric roller or nozzle roller X = Without roller					<b>Air flow</b>			
						9003 = White 9010 = Cream 00SB = Solar Black (Standard matte black) 00SM = Silver Matte (Standard metallic grey) _____ = RAL color (write the color number)					<b>Roller color</b>			
						A = With closed-cell acoustic insulation X = Without insulation					<b>Diffuser color</b>			
					D = With damper X = Without damper					<b>Acoustic insulation</b>				
					R = With register (perforated plate) X = Without register					<b>Damper</b>				
										<b>Register</b>				
<b>SRA</b>	1450	1300	203	X	254	03	006	DFS	W	9003	X	X	Annotation	<b>Exemple</b>

\* Ducts with dimensions 152 X 152 are not available

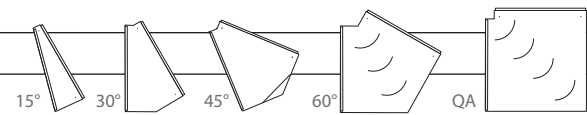
## Codification for end caps, collars, bivelled end caps

<b>SRA</b>	CAP = End cap WCO = Collar BEC = Bivelled end cap, BES = with slots (return), BEG = with grid (return)										<b>Product</b>
		152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219									<b>Width (Horizontal measures)</b>
			152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219								<b>Height (Vertical measures)</b>
				9003 = White 9010 = Cream 00SB = Solar Black (Standard matte black) 00SM = Silver Matte (Standard metallic grey) _____ = RAL color (write the color number)							<b>Diffuser color</b>
				A = With closed-cell acoustic insulation X = Without insulation							<b>Acoustic insulation</b>
<b>SRA</b>	CAP	203	X	254	9003	X					<b>Example</b>

# SRA - Codification

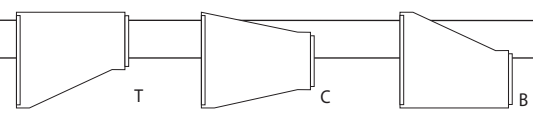
## Elbows codification

<b>SRA</b>	<b>ELB = Elbow</b>					<b>Product</b>
	15, 30, 45, 60, QA					<b>Angle</b>
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Width (Horizontal measures)</b>
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Height (Vertical measures)</b>
	9003 = White 9010 = Cream 00SB = Solar Black (Standard matte black) 00SM = Silver Matte (Standard metallic grey) ____ = RAL color (write the color number)					<b>Color</b>
	A = With closed-cell acoustic insulation X = Without insulation					<b>Acoustic insulation</b>
<b>SRA</b>	<b>ELB</b>	<b>15</b>	<b>203 X 203</b>	<b>9003</b>	<b>X</b>	<b>Example</b>



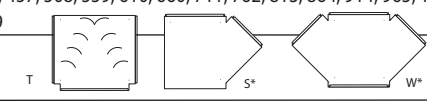
## Reducers codification

<b>SRA</b>	<b>RED = Reducer</b>					<b>Product</b>		
	T = Eccentric - top (standard) C = Center B = Eccentric - bottom					<b>Configuration</b>		
	203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Inlet Width</b>		
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Inlet Height</b>		
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Outlet Width</b>		
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Outlet Height</b>		
	S = Standard $\alpha = 14^\circ$ A = Other (specify in annotation)					<b>Length</b>		
	9003 = White 9010 = Cream 00SB = Solar Black (Standard matte black) 00SM = Silver Matte (Standard metallic grey) ____ = RAL color (write the color number)					<b>Color</b>		
	A = With closed-cell acoustic insulation X = Without insulation					<b>Acoustic insulation</b>		
<b>SRA</b>	<b>RED</b>	<b>T</b>	<b>203 X 203</b>	<b>203 X 203</b>	<b>S</b>	<b>9003</b>	<b>X</b>	<b>Example</b>



## Branch codification

<b>SRA</b>	<b>BRA = branch</b>					<b>Product</b>	
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Inlet Width</b>	
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Inlet Height</b>	
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Outlet Width</b>	
	152, 203, 254, 305, 356, 406, 457, 508, 559, 610, 660, 711, 762, 813, 864, 914, 965, 1016, 1067, 1118, 1168, 1219					<b>Outlet Height</b>	
	T, S, W					<b>Configuration</b>	
	9003 = White 9010 = Cream 00SB = Solar Black (Standard matte black) 00SM = Silver Matte (Standard metallic grey) ____ = RAL color (write the color number)					<b>Color</b>	
	A = With closed-cell acoustic insulation X = Without insulation					<b>Acoustic insulation</b>	
<b>SRA</b>	<b>BRA</b>	<b>305 X 305</b>	<b>203 X 203</b>	<b>T</b>	<b>9003</b>	<b>X</b>	<b>Example</b>



Notes: The « W » branch may have two different outlet diameters. \* For « S » and « W » fittings, add an elbow to the degree and diameter chosen to complete the branch.

# SRA - Codification

## Coding for anchorage system, with rail

RAI	S-33 Steel rail 22 mm X 41 mm X 3048 mm (7/8 in X 1 5/8 in X 10 li. ft) can be paint	
	9003 = White 9010 = Cream ____ = RAL color (4 number) XXXX = No paint	<b>Color</b>
RAI	S33 - 9003	<b>Example</b>
<b>Accessories supplied with the steel rail (S33) (2/SRA)</b>		
RKS	Fastening system Bolt, washer, lock washer and nut	

## Coding for suspension accessories with threaded rods (threaded rods are supplied by the installer)

RCT	Threaded rod cover 16 mm x 3.05 m (5/8 in x 10 ft)	
	9003 = White 9010 = Cream 00SB = Solar Black 00SM = Silver Matte ____ = RAL color (4 numbers) XXXX = No paint	<b>Color</b>
RCT	9003	<b>Example</b>
<b>Touch-up spray paint</b>		
CAN	9003 Paint can (RAL 9003)	
CAN	____ Paint can (other RAL color - 4 number)	
CAN	- 9003	<b>Example</b>

## Anchorage with cable

<b>Description of anchors for the ceiling</b>		
CPA	Anchor with hook nickel plated Ø 13 mm X 70 mm X 14.3 mm (Ø 1/2 in X 2 3/4 in X 9/16 in)	
CCP	Swiveling anchor nickel plated Not adjustable Ø 25 mm X 28.5 mm (Ø 1 in X 1 1/8 in) (screw not supplied)	
<b>Description of anchor for the diffuser</b>		
CCA	Anchor for duct Adjustment throttle nickel plated Ø 19 mm X 50 mm (Ø 3/4 in X 2 in)	
	XXXX = Without cable 3048 mm - standard (10 ft)	<b>Cable length</b>
	A = Nickel plated steel (standard) S = Stainless Steel (optional)	
CPA	3048 - A	<b>Example</b>