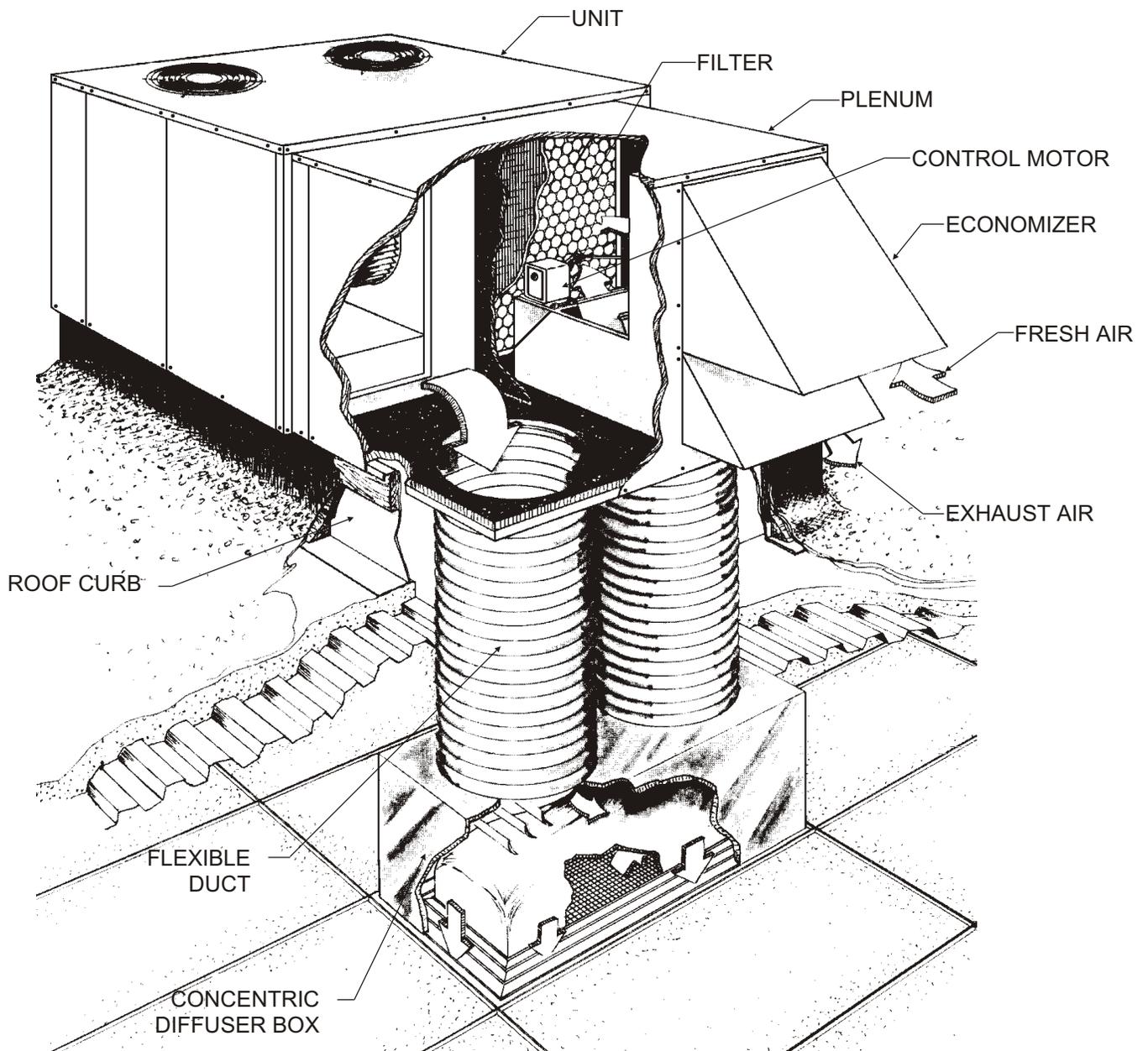


INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS CONCENTRIC DIFFUSER

FORM# 597A-0711 (Replaces 597A-1004)



INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS CONCENTRIC DIFFUSER

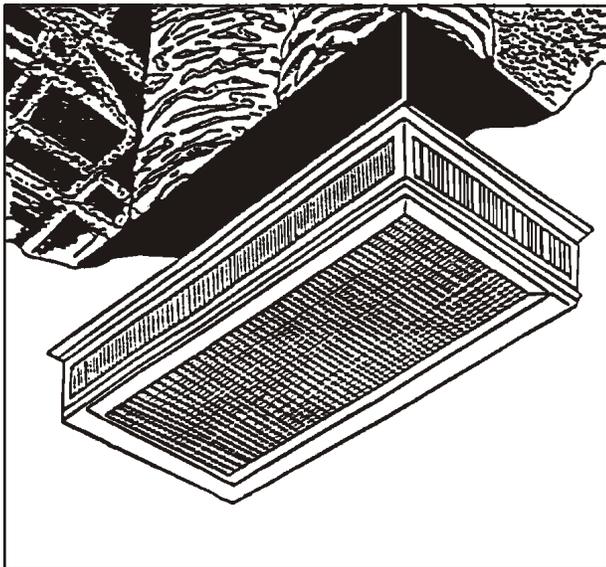


FLUSH MOUNT CONCENTRIC DIFFUSER SYSTEMS

Flush Mount concentric diffuser systems, are designed to provide a single point air distribution system. The systems may be used with either a "T-Bar ceiling or a plaster ceiling.

Standard features include:

1. All aluminum diffuser with aluminum return air eggcrate.
2. Built-in Anti-Sweat gasket.
3. Molded Fiberglass Transition (through five tons).
4. Built-in hanging supports.
5. Diffuser box constructed of fiberglass ductboard (through 7.5 tons) or sheet metal.



SIDE DISCHARGE CONCENTRIC DIFFUSER SYSTEM

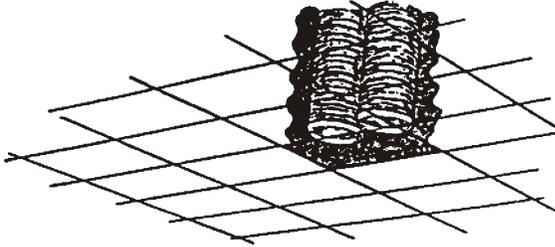
Side Discharge concentric diffuser systems are designed to provide a single point air distribution system with the added benefit of having directional air control. The system may be used with either a "T-Bar" ceiling or a plaster ceiling.

Standard features include:

1. All aluminum diffuser with aluminum return air eggcrate.
2. Double deflection diffuser with the blades secured by spring steel.
3. Built-in Anti-Sweat gasket.
4. Molded Fiberglass Transition. (through five tons).
5. Built-in hanging supports.
6. Diffuser box construction of fiberglass ductboard (through 7.5 tons) or sheet metal.

INSTALLATION INSTRUCTIONS

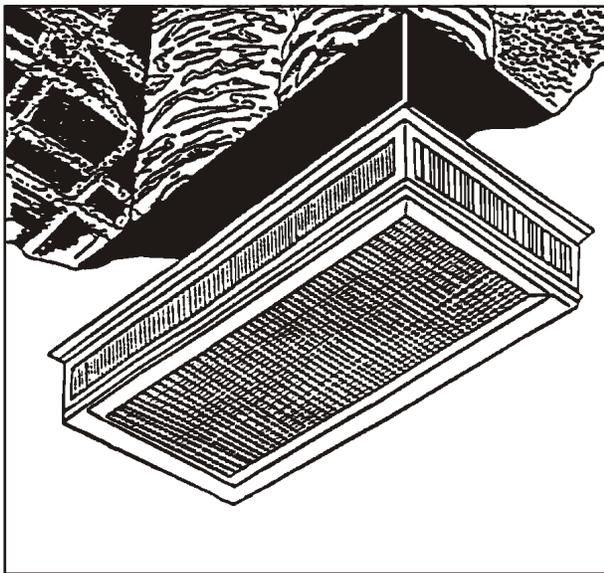
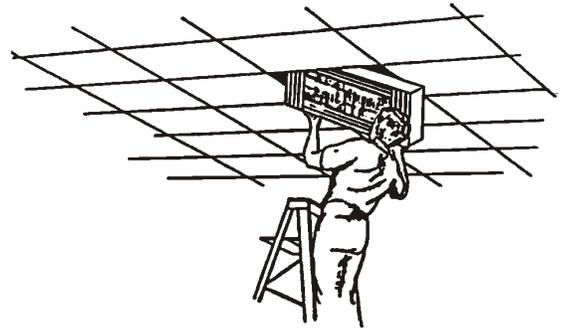
INSTALLATION INSTRUCTIONS CONCENTRIC DIFFUSER



1. The flex duct hanging from the unit should be close to the ceiling opening for the diffuser, as shown at left. One or two extra ceiling tiles must be removed in order to attach diffuser and duct properly. The flex duct will allow for some misalignment between the unit and the diffuser.

2. (Before installing diffuser make sure that the four small chains with turn buckles are in position.) Insert the diffuser through the opening where it will be located and aligned on the T-Bars. Attach the flex duct or sheet metal duct and hanger chains to remove any strain on the T-Bars.

Warning: Be sure supply opening is located under supply opening on the A/C Unit.

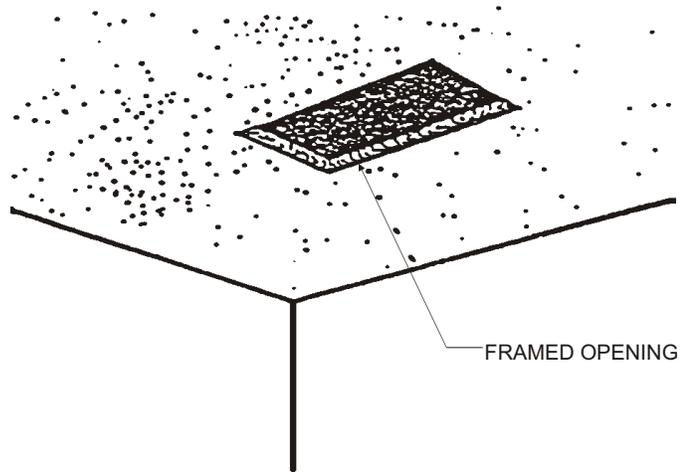


3. Make sure that the concentric diffuser is installed as shown in the picture at the right for proper support.

INSTALLATION INSTRUCTIONS

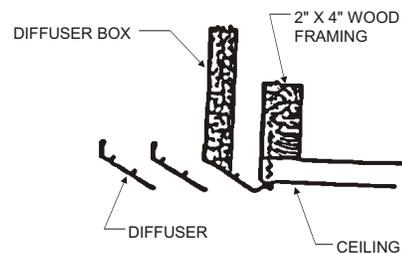
INSTALLATION INSTRUCTIONS CONCENTRIC DIFFUSER

1. Cut opening in ceiling $\frac{1}{2}$ inch larger than the diffuser box dimension shown on specifications. (Note: The box dimensions is smaller than the diffuser dimension). Frame opening with 2" x 4" wood nailer.



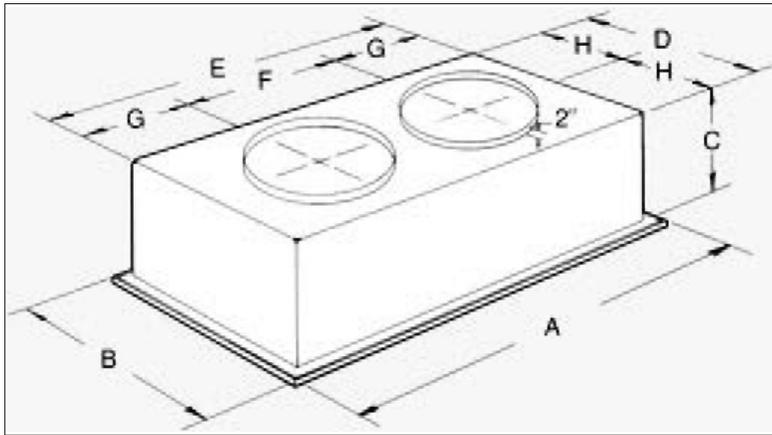
2. Connect duct to the diffuser assembly and slide the diffuser and duct into framed opening and secure with screws. In applications where long duct drops are required, it is advisable to connect a wire to duct to pull it up to the roof curb.

Warning: Be sure that the supply opening is located under the supply opening of the A/C unit.



INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS CONCENTRIC DIFFUSER



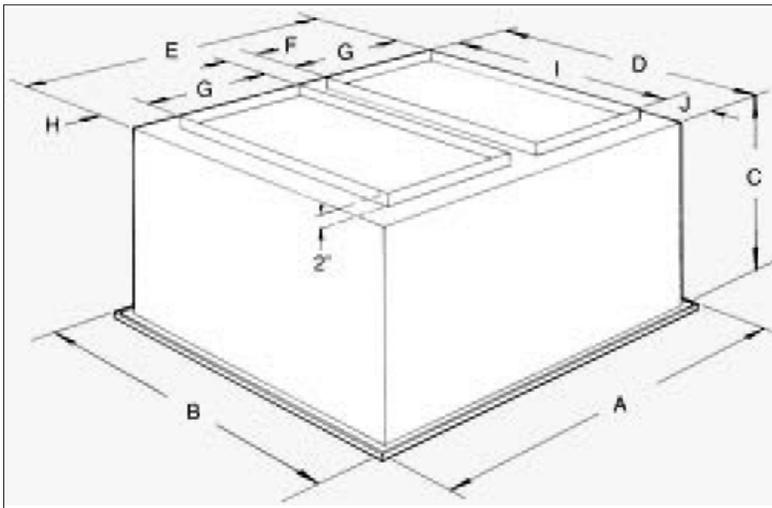
ENGINEERING DATA						
MODEL#	CFM	STATIC PRESSURE	THROW FEET	NECK VEL.	JET VEL.	NOISE LEVEL
547836	600	.09	10-14	234	417	18
	800	.11	12-18	313	556	20
	1000	.14	15-20	391	694	20
	1200	.17	16-22	469	833	25
547837	1200	.17	16-22	469	833	25
	1400	.20	17-24	547	972	30
	1600	.24	18-25	625	1111	30
	1800	.30	20-28	703	1250	35
	2000	.36	21-29	781	1389	40
	2200	.40	22-30	859	1528	40
547870	2600	.17	19-24	663	1294	30
	2800	.20	20-28	714	1393	35
	3000	.25	21-29	765	1492	35
	3200	.31	22-29	816	1592	40
3400	.37	22-30	867	1692	40	

NOTES:

- All data is based on the Air Diffusion Council guidelines.
- Throw data is based on Terminal Velocities of 75 FPM using isothermal air.
- Actual noise levels are less than those shown.

DIMENSIONAL DATA

MODEL#	A	B	C	D	E	F	G	H	DUCT SIZE
547836	47 ⁵ / ₈	23 ⁵ / ₈	13 ¹ / ₂	21	45	22 ¹ / ₂	11 ¹ / ₄	10 ¹ / ₂	16 RD
547837	47 ⁵ / ₈	23 ⁵ / ₈	13 ¹ / ₂	21	45	22 ¹ / ₂	11 ¹ / ₄	10 ¹ / ₂	18 RD
547870	47 ⁵ / ₈	29 ⁵ / ₈	16 ⁵ / ₈	27	45	22 ¹ / ₂	11 ¹ / ₄	13 ¹ / ₂	20 RD



ENGINEERING DATA						
MODEL#	CFM	STATIC PRESSURE	THROW FEET	NECK VEL.	JET VEL.	NOISE LEVEL
547879	3600	.17	22-29	844	1646	35
	3800	.18	22-30	891	1737	40
	4000	.21	24-33	938	1829	40
	4200	.24	26-35	985	1920	40
	4400	.27	28-37	1032	2011	40
555637	4600	.31	25-34	922	1795	40
	4800	.32	26-35	962	1873	40
	5000	.34	27-36	1002	1951	40
	5200	.36	30-39	1043	2029	45
5400	.39	32-41	1083	2107	45	
555638	5600	.36	28-37	1000	2082	45
	5800	.39	29-38	1036	2156	45
	6000	.42	40-50	1071	2230	45
	6200	.46	42-51	1107	2308	50
	6400	.50	43-52	1143	2379	50
	6600	.54	45-56	1179	2454	50

NOTES:

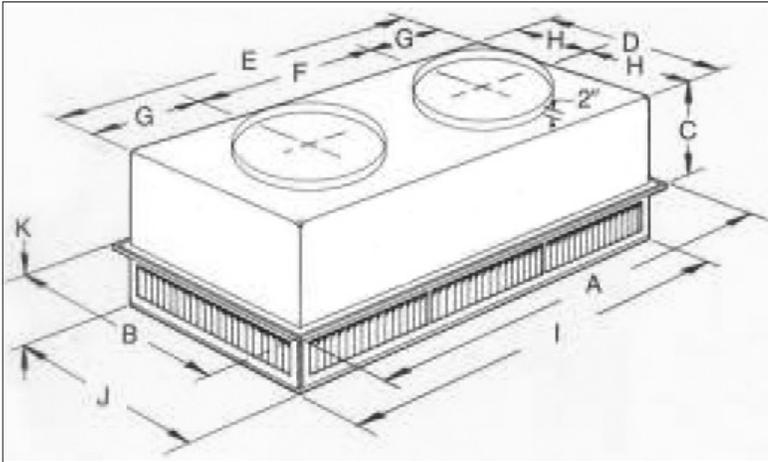
- All data is based on the Air Diffusion Council guidelines.
- Throw data is based on Terminal Velocities of 75 FPM using isothermal air.
- Actual noise levels are less than those shown.

DIMENSIONAL DATA

MODEL#	A	B	C	D	E	F	G	H	I	J	DUCT SIZE
547879	47 ⁵ / ₈	35 ⁵ / ₈	23 ¹ / ₄	33	45	4 ¹ / ₂	18	2 ¹ / ₄	28	2 ¹ / ₂	18x28
555637	47 ⁵ / ₈	41 ⁵ / ₈	29 ¹ / ₄	39	45	4 ¹ / ₂	18	2 ¹ / ₄	32	3 ¹ / ₄	18x32
555638	47 ⁵ / ₈	47 ⁵ / ₈	29 ¹ / ₄	45	45	4 ¹ / ₂	18	2 ¹ / ₄	36	4 ¹ / ₂	18x36

INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS CONCENTRIC DIFFUSER



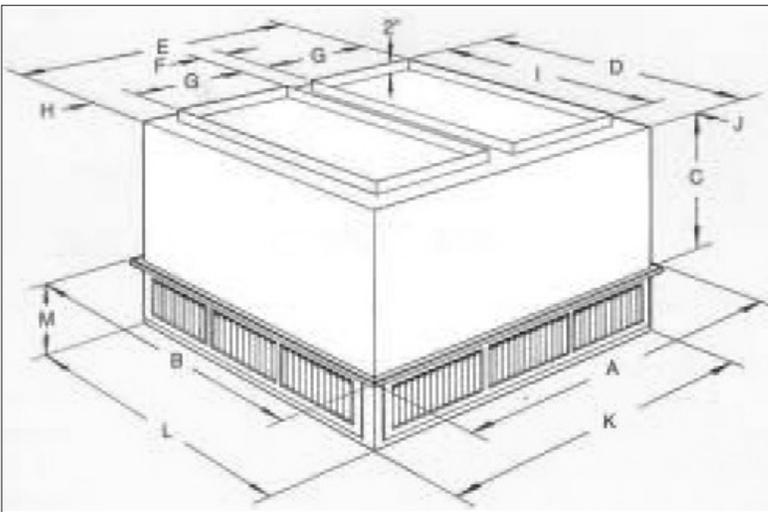
ENGINEERING DATA					
MODEL#	CFM	STATIC PRESSURE	THROW FEET	NECK/JET VEL.	NOISE LEVEL
547838	600	.09	8-15	210	20
	800	.11	9-16	281	20
	1000	.14	10-17	351	20
	1200	.17	11-18	421	20
547839	1200	.17	11-18	421	20
	1400	.20	12-19	491	20
	1600	.24	12-20	561	20
	1800	.30	13-21	632	20
	2000	.36	14-23	702	20
	2200	.40	16-25	772	20
547871	2600	.17	24-29	669	20
	2800	.20	25-30	720	25
	3000	.25	27-33	772	25
	3200	.31	28-35	823	25
	3400	.37	30-37	874	30

NOTES:

1. All data is based on the Air Diffusion Council guidelines.
2. Throw data is based on Terminal Velocities of 75 FPM using isothermal air.
3. Actual noise levels are less than those shown.
4. Throw is based on diffuser blades being directed in a straight pattern.

DIMENSIONAL DATA

MODEL#	A	B	C	D	E	F	G	H	I	J	K	DUCT SIZE
547838	47 5/8	23 5/8	11 3/8	21 1/2	45 1/2	22 1/2	11 1/2	10 3/4	45 1/2	21 1/2	7 1/8	16 RD
547839	47 5/8	23 5/8	11 3/8	21 1/2	45 1/2	22 1/2	11 1/2	10 3/4	45 1/2	21 1/2	7 1/8	18 RD
547871	47 5/8	29 5/8	14 3/8	27 1/2	45 1/2	22 1/2	11 1/2	13 3/4	45 1/2	27 1/2	8 1/8	20 RD



ENGINEERING DATA					
MODEL#	CFM	STATIC PRESSURE	THROW FEET	NECK/JET VEL.	NOISE LEVEL
547880	3600	.17	25-33	851	30
	3800	.18	27-35	898	30
	4000	.21	29-37	946	30
	4200	.24	32-40	993	30
	4400	.27	34-42	1040	30
555639	4600	.31	26-31	841	30
	4800	.32	27-32	878	30
	5000	.34	28-33	915	30
	5200	.36	28-34	951	30
	5400	.39	29-35	988	30
555640	5600	.36	39-49	920	30
	5800	.39	42-51	954	30
	6000	.42	44-54	1022	30
	6200	.46	45-55	1056	30
	6400	.50	46-55	1090	30
6600	.54	47-56	1124	30	

NOTES:

1. All data is based on the Air Diffusion Council guidelines.
2. Throw data is based on Terminal Velocities of 75 FPM using isothermal air.
3. Actual noise levels are less than those shown.
4. Throw is based on diffuser blades being directed in a straight pattern.

DIMENSIONAL DATA

MODEL#	A	B	C	D	E	F	G	H	I	J	K	L	M	DUCT SIZE
547880	47 5/8	35 5/8	20 5/8	33 1/2	45 1/2	4 1/2	18	2 1/2	28	2 3/4	45 1/2	33 1/2	9 1/8	18x28
555639	47 5/8	41 5/8	24 5/8	39 1/2	45 1/2	4 1/2	18	2 1/2	32	3 3/4	45 1/2	39 1/2	9 1/8	18x32
555640	47 5/8	47 5/8	24 5/8	45 1/2	45 1/2	4 1/2	18	2 1/2	36	4 3/4	45 1/2	45 1/2	10 1/8	18x36

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SUPERSEDES 10-12-04
JULY 22, 2011

Form# RSI-CI-N