

Note to Designer:
 The information presented in this Standard Detail has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

NO.	DATE	DESCRIPTION OF REVISIONS
1	0-10-11	Original Issue
2	5-15-11	Added 3'-4.5' height for existing box extensions only
3		
4		

INLET WINGS																																									
Span	Height	0° Skew				5° Skew				10° Skew				15° Skew				20° Skew				25° Skew				30° Skew				35° Skew				40° Skew				45° Skew			
		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.					
		I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s				
6'	3'	5.72	0.86	407	80	6.06	0.87	443	80	6.29	0.88	459	81	6.64	0.89	489	83	7.28	0.92	540	85	7.67	0.95	564	88	7.64	1.00	569	93	7.75	1.05	577	98	7.88	1.13	581	105	8.15	1.22	602	113
	4'	8.09	0.86	577	80	8.18	0.87	589	80	8.60	0.88	625	81	9.31	0.89	674	83	10.02	0.92	732	85	10.60	0.95	774	88	10.71	1.00	789	93	10.69	1.05	775	98	10.84	1.13	786	105	11.17	1.22	808	113
	5'	10.55	0.86	738	80	10.96	0.87	782	80	11.36	0.88	810	81	12.14	0.89	874	83	13.10	0.92	940	85	13.90	0.95	995	88	13.86	1.00	999	93	14.01	1.05	1011	98	14.20	1.13	1021	105	14.65	1.22	1045	113
	6'	13.47	0.86	930	80	13.93	0.87	967	80	14.76	0.88	1038	81	15.68	0.89	1086	83	16.83	0.92	1162	85	17.83	0.95	1232	88	17.63	1.00	1230	93	17.70	1.05	1242	98	18.18	1.13	1261	105	18.76	1.22	1308	113
	7'	16.77	0.86	1235	80	17.46	0.87	1308	80	18.33	0.88	1369	81	19.39	0.89	1359	83	21.04	0.92	1483	85	22.13	0.95	1568	88	22.10	1.00	1571	93	22.42	1.05	1593	98	22.75	1.13	1620	105	23.39	1.22	1674	113
8'	3'	6.02	1.13	458	105	6.36	1.14	499	106	6.60	1.15	517	107	6.96	1.17	550	109	7.60	1.21	605	112	8.01	1.25	632	116	7.99	1.31	630	121	8.12	1.38	647	128	8.28	1.48	652	137	8.58	1.60	675	149
	4'	8.40	1.13	602	105	8.49	1.14	614	106	8.91	1.15	650	107	9.63	1.17	707	109	10.35	1.21	766	112	10.94	1.25	808	116	11.07	1.31	814	121	11.06	1.38	811	128	11.24	1.48	824	137	11.60	1.60	847	149
	5'	10.86	1.13	763	105	11.27	1.14	808	106	11.68	1.15	836	107	12.46	1.17	907	109	13.44	1.21	970	112	14.25	1.25	1026	116	14.22	1.31	1028	121	14.39	1.38	1048	128	14.60	1.48	1059	137	15.08	1.60	1085	149
	6'	13.78	1.13	997	105	14.24	1.14	1036	106	15.08	1.15	1110	107	16.00	1.17	1170	109	17.17	1.21	1246	112	18.18	1.25	1326	116	18.00	1.31	1316	121	18.08	1.38	1327	128	18.59	1.48	1356	137	19.20	1.60	1406	149
	7'	17.08	1.31	1261	105	17.78	1.14	1334	106	18.65	1.15	1395	107	19.72	1.17	1387	109	21.38	1.21	1517	112	22.49	1.25	1603	116	22.47	1.31	1599	121	22.81	1.38	1629	128	23.16	1.48	1651	137	23.84	1.60	1712	149
8'	25.74	1.13	1497	105	26.60	1.14	1532	106	27.78	1.15	1614	107	29.20	1.17	1703	109	31.58	1.21	1858	112	33.41	1.25	2003	116	33.20	1.31	1981	121	33.52	1.38	1991	128	34.11	1.48	2037	137	35.36	1.60	2112	149	
10'	3'	6.33	1.40	515	130	6.68	1.41	545	131	6.92	1.43	563	132	7.29	1.45	591	135	7.94	1.49	648	139	8.36	1.55	680	144	8.36	1.62	683	150	8.50	1.71	724	188	8.68	1.83	740	201	9.02	1.99	764	217
	4'	8.71	1.40	650	130	8.80	1.41	663	131	9.23	1.43	700	132	9.96	1.45	752	135	10.69	1.49	814	139	11.30	1.55	861	144	11.44	1.62	872	150	11.46	1.71	893	188	11.66	1.83	917	201	12.05	1.99	940	217
	5'	11.17	1.40	814	130	11.59	1.41	860	131	12.00	1.43	889	132	12.80	1.45	957	135	13.79	1.49	1022	139	14.62	1.55	1078	144	14.60	1.62	1089	150	14.79	1.71	1135	188	15.02	1.83	1157	201	15.54	1.99	1183	217
	6'	14.10	1.40	1051	130	14.56	1.41	1091	131	15.41	1.43	1164	132	16.35	1.45	1223	135	17.53	1.49	1302	139	18.55	1.55	1387	144	18.39	1.62	1381	150	18.48	1.71	1417	188	19.01	1.83	1458	201	19.66	1.99	1509	217
	7'	17.41	1.40	1318	130	18.10	1.41	1393	131	18.99	1.43	1455	132	20.06	1.45	1443	135	21.75	1.49	1577	139	22.87	1.55	1668	144	22.87	1.62	1670	150	23.22	1.71	1724	188	23.60	1.83	1757	201	24.30	1.99	1818	217
8'	26.08	1.40	1558	130	26.95	1.41	1590	131	28.14	1.43	1678	132	29.58	1.45	1763	135	31.98	1.49	1913	139	33.82	1.55	2064	144	33.63	1.62	2056	150	33.96	1.71	2091	188	34.57	1.83	2147	201	35.87	1.99	2223	217	
12'	8'	26.47	1.69	1581	156	27.35	1.69	1621	157	28.55	1.71	1709	159	30.00	1.74	1798	162	32.43	1.79	1954	196	34.30	1.86	2104	204	34.12	1.95	2094	213	34.47	2.06	2103	265	35.10	2.20	2154	334	36.43	2.38	2234	361

OUTLET WINGS																																									
Span	Height	0° Skew				5° Skew				10° Skew				15° Skew				20° Skew				25° Skew				30° Skew				35° Skew				40° Skew				45° Skew			
		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.		Conc. C.Y.		Steel lbs.					
		I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s	I Bbl.	Δ c	I Bbl.	Δ s				
6'	3'	10.48	1.55	779	135	10.50	1.56	780	135	10.51	1.58	773	137	10.73	1.61	794	140	10.77	1.65	797	143	10.70	1.71	783	149	10.65	1.79	793	156	10.79	1.90	803	165	10.97	2.03	809	177	11.36	2.20	844	191
	4'	13.99	1.55	1019	135	14.18	1.56	1026	135	14.00	1.58	1011	137	14.24	1.61	1035	140	14.50	1.65	1046	143	14.23	1.71	1033	149	14.37	1.79	1053	156	14.34	1.90	1041	165	14.54	2.03	1055	177	14.98	2.20	1089	191
	5'	17.82	1.55	1278	135	18.02	1.56	1286	135	18.06	1.58	1293	137	18.32	1.61	1304	140	18.60	1.65	1332	143	18.13	1.71	1294	149	18.07	1.79	1303	156	18.26	1.90	1317	165	18.49	2.03	1329	177	19.05	2.20	1367	191
	6'	22.10	1.55	1516	135	22.34	1.56	1525	135	22.38	1.58	1559	137	22.66	1.61	1570	140	22.98	1.65	1597	143	22.70	1.71	1575	149	22.44	1.79	1574	156	22.49	1.90	1584	165	23.07	2.03	1609	177	23.76	2.20	1670	191
	7'	26.74	1.55	1838	135	26.94	1.56	1844	135	27.01	1.58	1925	137	27.66	1.61	1962	140	28.01	1.65	1983	143	27.60	1.71	1951	149	27.50	1.79	1956	156	27.86	1.90	1979	165	28.24	2.03	2009	177	28.99	2.20	2076	191
8'	3'	11.05	2.02	853	177	11.06	2.03	854	178	11.08	2.05	848	180	11.31	2.09	884	184	11.37	2.15	888	189	11.31	2.23	874	196	11.28	2.34	870	204	11.46	2.47	896	216	11.69	2.64	904	231	12.13	2.86	942	251
	4'	14.56	2.02	1059	177	14.75	2.03	1067	178	14.59	2.05	1052	180	14.84	2.09	1091	184	15.11	2.15	1102	189	14.86	2.23	1090	196	15.02	2.34	1097	204	15.02	2.47	1101	216	15.27	2.64	1116	231	15.76	2.86	1153	251
	5'	18.41	2.02	1319	177	18.62	2.03	1326	178	18.65	2.05	1334	180	18.93	2.09	1359	184	19.22	2.15	1383	189	18.76	2.23	1348	196	18.73	2.34	1347	204	18.95	2.47	1377	216	19.23	2.64	1391	231	19.84	2.86	1432	251
	6'	22.70	2.02	1615	177	22.94	2.03	1625	178	22.98	2.05	1659	180	23.28	2.09	1685	184	23.62	2.15	1714	189	23.35	2.23	1691	196	23.11	2.34	1636	204	23.20	2.47	1693	216	23.82	2.64	1729	231	24.56	2.86	1794	251
	7'	27.35	2.02	1879	177	27.56	2.03	1885	178	27.63	2.05	1967	180	28.30	2.09	2010	184	28.66	2.15	2040	189	28.26	2.23	2009	196	28.19	2.34	2000	204	28.57	2.47	2040	216	28.99	2.64	2064	231	29.80	2.86	2139	251
8'	38.78	2.02	2354	177	38.54	2.03	2349	178	38.93	2.05	2368	180	39.47	2.09	2414	184	40.26	2.15	2473	189	39.37	2.23	2448	196	39.10	2.34	2422	204	39.41	2.47											