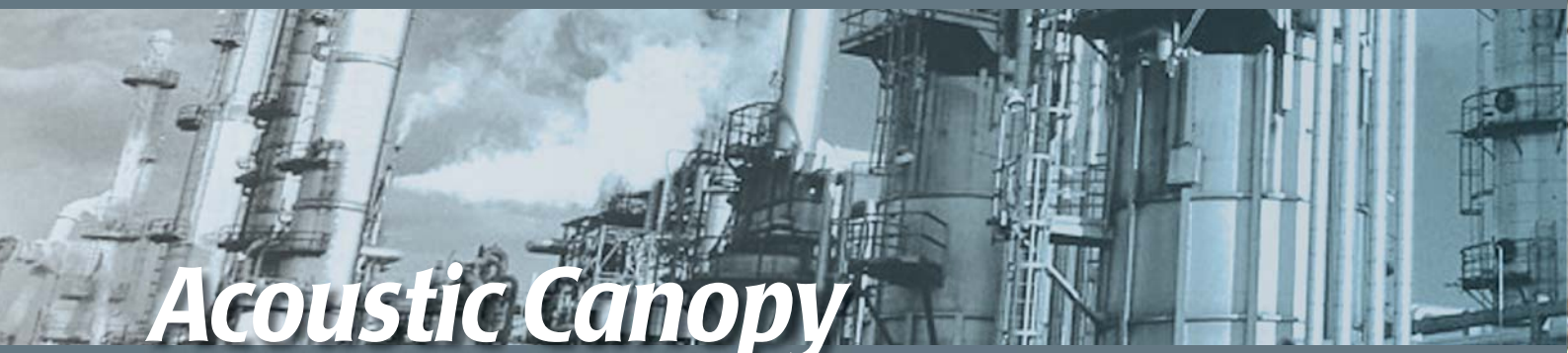
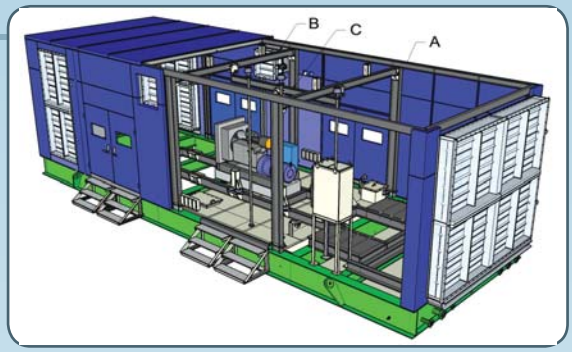


Acoustic Canopy

Applications Notes



ISTIQ ACOUSTIC CANOPY is designed to comply to the DOE regulation. The canopy are equipped with Discharge, Intake and Exhaust silencers. The noise level is designed to achieved 70 to 75 dB(A) measured at 3 meter away.

In selecting a silencer for a canopy, a balance between noise reduction, pressure drop and heat rejection need to be calculated cautiously By using internally developed software, **ISTIQ NOISE CONTROL** can help to make the right choice quickly and most importantly, accurately.

Introduction

Canopy application for housing a generator set has gaining its popularity over the years. This is due to a portability of the set to be from one place to another and furthermore the cost for housing a generator set is cheaper as compare to a normal concrete house.

Construction

The internal construction of the canopy panel uses only rockwool and protected with perforated G.I. This construction has proven to be the most cost effective in the long run.

ISTIQ NOISE CONTROL has developed the modular system panel which provides great flexibility at low cost. The panel are standard 65mm thickness, formed from 2.3mm mild steel, inert acoustic infill and galvanised perforated inner sheet steel. The finest quality materials and workmanship ensure that a final solution gives the best in noise control without affecting airflow, operation, maintenance or inspection.

Exhaust pipe which is inside the canopy must be insulated to avoid overheating problem. The exhaust lagging is done by using rockwool as thermal insulation wrapped with aluminium jacketing.

Fuel tank is located at the base frame. The designed therefore will serve dual purposes - acting as a supporting base and fuel tank. The body and the base can be separated for maintenance (genset overhaul) in the future. Windows, exhaust penetrations, radiators and electrical cables, fitting and fixtures are all standard.

Standard Material Specification		
a)	Outer casing	2.3mm thk. M.S Plate
b)	Inner casing	0.4mm thk. Perf G.I
c)	Percentage of perforation	30% to 40%
d)	Panel thickness	65mm thk.
e)	Frame and support	2.3 - 3.2mm M.S Hollow Section
f)	Acoustic Infill	40kg/m3 density Rockwool
g)	Rockwool Thermal Conductivity	0.034 W/mK at 20 deg C
h)	Observation Panel	5mm thk transparent plexiglass
i)	Glass panel rubber	14 'L Normal type
j)	Lock set	Slam Paddle with Lock
k)	Door hinges	Lift-Off Flag Hinge
l)	Acoustic Seal	Rubber c/w magnetic seal
m)	Painting	One coat primer and two coats finishing

Standard Canopy Dimensions

Rating kVA	A	B	C	D	E	E1	F	G	G1
40	1000	2500	1350	150	700	800	450	200	1000
56	1000	2500	1350	150	700	800	450	200	1000
66	1000	2500	1350	150	700	800	450	200	1000
90	300	3800	1700	150	900	1000	550	250	1200
110	1300	3800	1700	150	900	1000	550	250	1200
147	1300	3800	1700	150	900	1000	550	250	1200
212	1500	4300	2000	200	900	1200	600	300	1500
253	1500	4300	2000	200	900	1200	600	300	1500
281	1500	4300	2000	200	900	1200	600	300	1500
313	1500	4300	2000	200	900	1200	600	300	1500
330	1500	4300	2300	250	1000	1200	600	300	1800
345	1500	4300	2300	250	1000	1200	600	300	1800
390	1500	4300	2300	250	1000	1200	600	300	1800
416	1800	5100	2300	250	1000	1200	900	450	1800
500	1800	5100	2300	250	1000	1200	900	450	1800
562	1800	5100	2300	250	1000	1200	900	450	1800