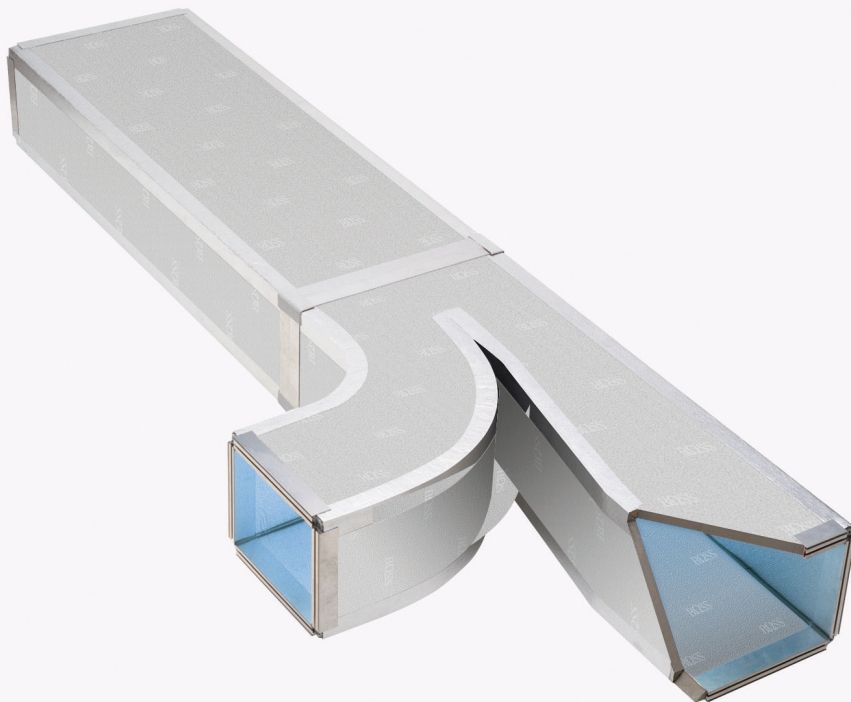




**BΩSS®**



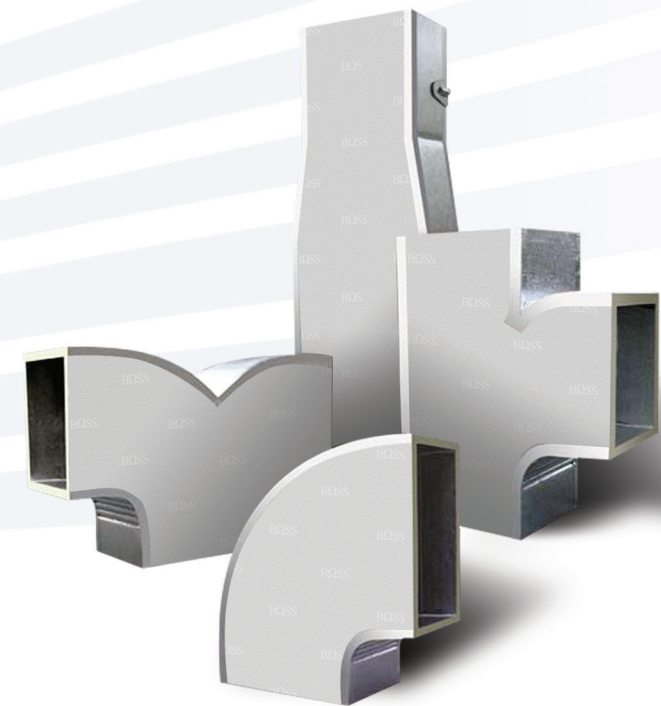
Ductal System

Pre-insulated Aluminium Duct



Air is the essence of life

BOSS®



Ductal System

Pre-insulated Aluminium Duct









# Advantages of BOSS Duct Panels



### THERMAL CONDUCTIVITY

Special closed-cell insulation guarantees low thermal conductivity and reduces the risk of condensation.



### ENERGY SAVING

Perfect thermal insulation and optimum airtight seal allow for maximum use of air handling unit capacity, increasing efficiency and reducing operating costs.



### SAFETY

BOSS ducts do not melt and drop and smokes from fire hazard have a reduced opacity and toxicity enhancing safety.



### LIGHT WEIGHT

The very light weight allows a reduction of weight on supporting points, structures, labor costs and materials for the installation.



### DURABILITY

The outer aluminium coating coupled with the insulating material provides sturdiness, rigidity and good resistance to corrosion, erosion and deformation even in special applications.



### FRICTION LOSS

Low levels of linear friction losses due to low number of flanges and limited surface roughness.



### AIRTIGHT SEAL

BOSS ducts are eight times more airtight than traditional ducts.



### HYGIENE & AIR QUALITY

The use of aluminium for the internal surfaces of ducts ensures hygiene and cleanliness. The problem of ageing of the insulation and consequent release of particles is non-existent.



### PRODUCTION FLEXIBILITY

Manufacturing BOSS ducts is easy to do in a work shop or directly at job site reducing transportation costs.



## BOSS DUCT PANEL

BOSS Pre Insulated Aluminium duct is a sandwich panel composed of a layer based from good fire retardant rigid polyisocyanurate (PIR) foam covering both sides with aluminium foil. The aluminium is especially coated with anti bacterial coating and guarantees sturdiness and withstands corrosion.

Size of panel	4000 x 1200 mm
Thickness of Panel	20 mm
Thickness of external / internal aluminium	80/80 µm
Finish of the Aluminium	Embossed/ smooth

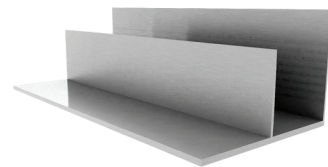
## SPECIFICATIONS

Thickness of Panel	: 20 mm
Density of Panel	: 71,5 Kg/m <sup>3</sup>
Compressive Strength	: 200N/mm <sup>2</sup>
Thermal Conductivity	: 0.0115 W/m °C
R Value	: 1,70
Flame Retardant	: Class O
Friction Coefficient	: 0,0134
Weight	: 1.45 Kg/m <sup>2</sup>
Working Temperature	: -60°C - +80°C
Humidity	: 0 - 100%
Pressure in Duct Max	: 2,000 Pa
Air Flow Max	: 12 m/s
Green Product	: Non CFC "O" Ozone Depleting Potential

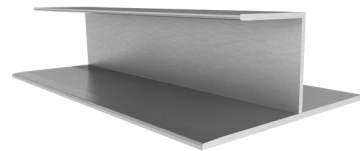




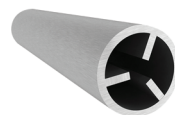
## ACCESSORIES



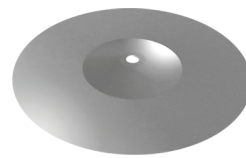
"F" Aluminium Type



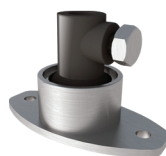
"C" Aluminium Type



Reinforcement Aluminium Bar



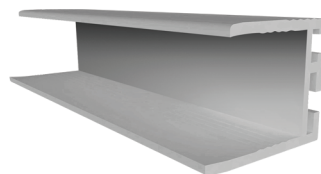
Shaped Aluminium Disk



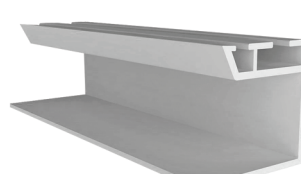
Joint Damper



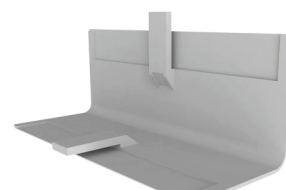
Zinc-Coated Steel Angle Bracket



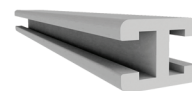
Flange PVC Joint



Tee Connector Flange PVC Joint



PVC Angle



Bayonet PVC Joint

## GLUE & SEALANT

Special Glue formulated to obtain perfect adhesion on BQSS pre-insulated Aluminium Duct panel foam.

Special Sealant (Non-corrosive ) to prevent air leakage and preserve air quality in the duct.



## CUTTER



## Tools for Duct Installation

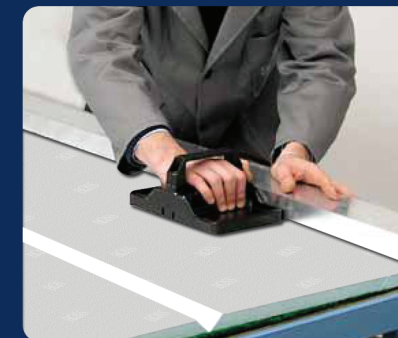
### 45° LEFT OR RIGHT AND 90° STRAIGHT CUTTER KNIFE

Aluminium die-casted cutter knife with specially designed ergonomic handle that allows precise 45° and 90°. Different handle colors are available for different angle cuts.



### V CUTTER KNIFE

Easy grip V cutter enables precise V cut and manouverability. Made from die-casted aluminum, and designed with slotted holes, replacing the blade is simple and quick. The correct blade length also permits V cut in the panels without marking the inferior aluminium foil.



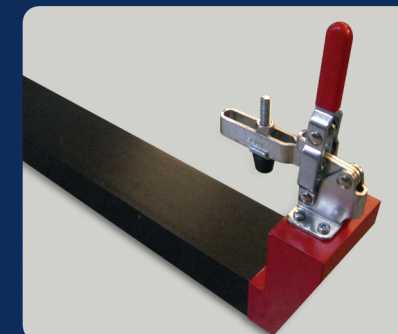
### MANUAL BENDING TOOLS

Simple to use and portable, the manual bending tools can be easily used to make radius elbow and fittings in the work site.



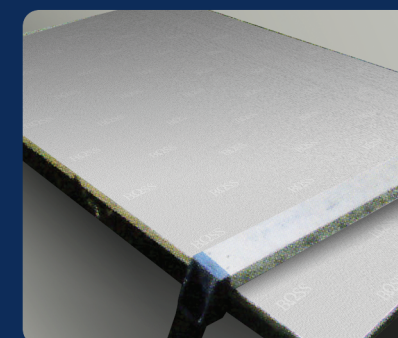
### ALUMINIUM RULER ( 1200mm & 4000mm)

Designed with a built-in locking mechanism, the aluminium ruler serves as both a guide for the cutter knife and to secure the panel in place on the work table.



### WORK TABLE ( 4 X 1.2 m )

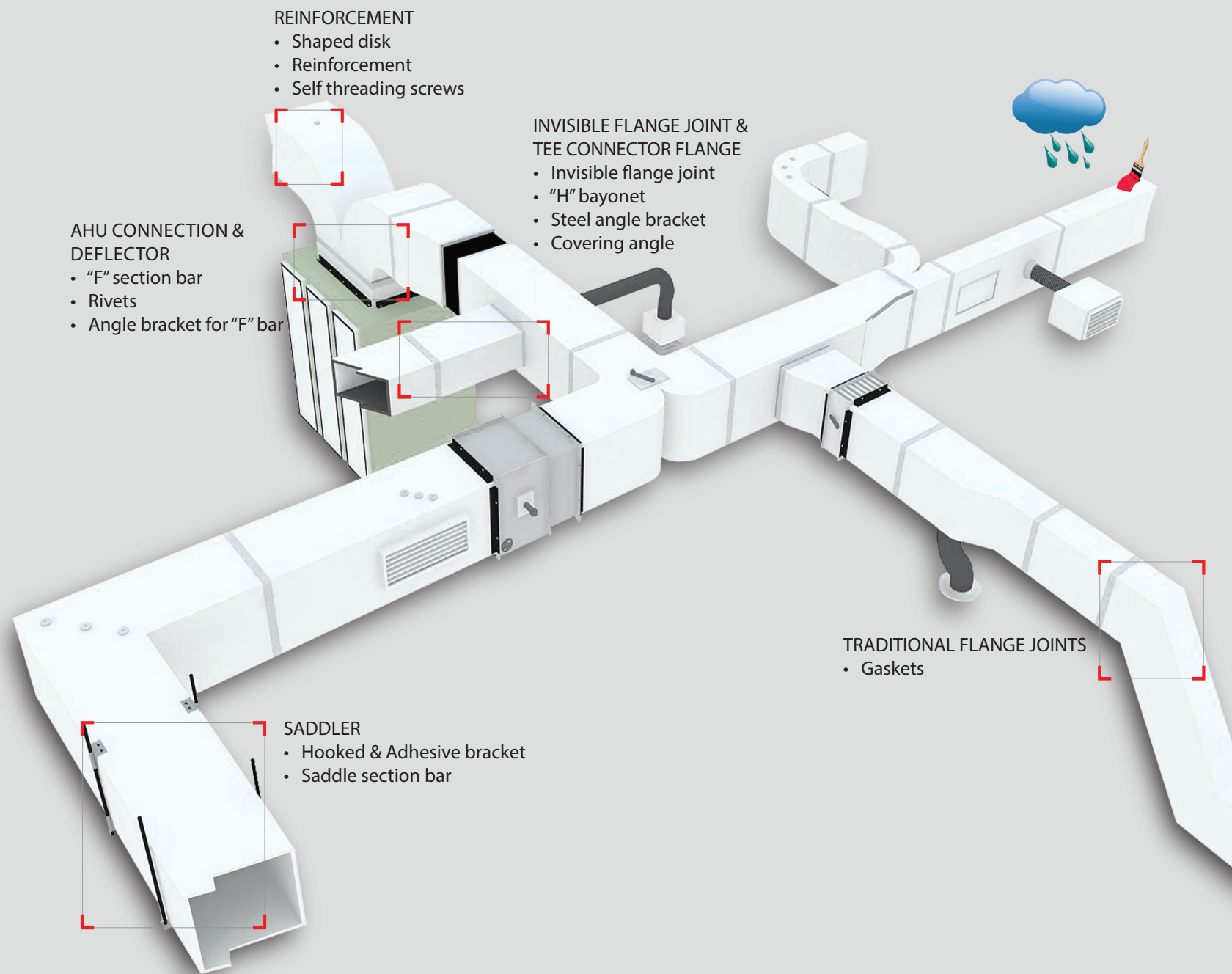
Specially designed tables for cutting and constructing BQSS duct panels, the table is overlaid with carpet to ensure ease of cutting and durability of the blade.





# General View

Accessories application and duct installation



# Project Reference

RSUD Badung Bali	Bali	Hotel Grand Mercure Kemayoran	Jakarta
Park Mall	Bali	Helipad Resinda Karawang	Karawang
Holiday Inn	Bali	Grand Mercure Kemayoran	Jakarta
Asia Garments	Bekasi	Apartement Reginald	Tangerang
Food Court Yogja	Bogor	Hotel JHL Solitaire BSD	Tangerang
Pabrik Pouchen Indonesia (PUMA)	Cilegon	Cafe Colony 6 Kemang	Jakarta
Pabrik Bungasari Flour Mills Indonesia	Cilegon	Chappel Lampung	Lampung
The Margo Hotel	Depok	Bank Dinar Juanda	Jakarta
Soho CP Tenant	Jakarta	Bandara Solo	Jakarta
Hotel Jambuluwuk Jl. Riau	Jakarta	ABB WTC 3	Jakarta
Dinas Teknik Kuningan	Jakarta	Gold Coast PIK	Jakarta
BI Institute Kuningan	Jakarta	Sanno Hotel Pluit	Solo
Menara Palma 2 Kuningan	Jakarta	Nusantara Film Office Wahid Hasyim	Jakarta
Satrio Tower Kuningan	Jakarta	Cinema XXI Transmart Cibubur	Cibubur
Ciputra World 2 Office	Jakarta	Cinema XXI Ramayana	Pekalongan
Mess Pertamina Simprug	Jakarta	Cinema XXI Jember	Jember
Royal Orchard – Kelapa Gading	Jakarta	Cinema XXI Ramayana	Cikupa
Nutrifood Kawasan MM2100	Cikarang	Cinema XXI Solo	Solo
Japaness Hotel	Cikarang	Cinema XXI Transmart Pekalongan	Pekalongan
Padma Hotel	Karawang	Cinema XXI Semarang	Semarang
Mitra Sejati Office	Kudus	Cinema XXI Central City Semarang	Semarang
Safin Hotel	Pati	Cinema XXI Ramayana Tajur	Bogor
Resinda Park Mall	Karawang	Cinema XXI Majapahit Semarang	Semarang
Hotel Neo	Palangkaraya	Graha Raya Regency - Tangerang	Tangerang
Makassar Mall	Makassar	Mall Boxies	Bogor
Manhattan Mall & Apartment	Medan	SCBD LOT 8 Office	Jakarta
Aneka Warna Office	Palembang	JIEXPO Kemayoran	Jakarta
Hotel Zets & Swiss Bell	Tangerang	Hotel Renaissance	Bali
Paragon Hotel	Tangerang	Mix Used Kebon Sirih	Jakarta
GBI Alam Sutera	Tangerang	Pabrik Furniture Kudus	Kudus
AEON Sentul	Sentul	Hotel Aston Kuningan	Jakarta
Mall Cilegon Center	Cilegon	Hotel Ascot - Permata Hijau	Jakarta
Transmart Kupang	NTT	Gedung Kantor KONI	Bintaro
Discovery Hotel Ancol	Jakarta	Marco Salon Office	Jakarta
Tiara & Stock BSD	Tangerang	Kantor BIN Kalibata	Jakarta
Hotel Sheraton Belitung	Belitung	Hotel Kokoon	Banyuwangi
PTC New Palembang	Palembang	Office Eiffel - PIK	Jakarta
Hotel Everbright	Bojonegoro	Market Waena Jayapura	Papua
Cinema XXI Podomoro Deli Medan	Medan	Point Square Mall	Jakarta
Midtwon Gallery	Gading Serpong	Cinema XXI Manokwari	Papua



Proyek Nutrifood Kawasan Industri MM2100, Cibitung



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