

Helicopter hangars

Innovative fabric buildings





Rubb's alternative helicopter hangar solutions serve police, air ambulance, military, and civil aviation clients around the globe.

Rubb is a leading manufacturer of temporary and permanent custom-designed helicopter hangars.

Many aviation organisations are reaping the topflight benefits of Rubb specialist and custom-designed helicopter hangars. Rubb has a proven track record in delivering fast, flexible, and cost-effective helicopter hangars to aviation and military organisations to protect their helicopters.

With over 45 years experience of designing, manufacturing, and constructing custom hangars we have built relationships with high-profile clients worldwide.

Advantages



Low maintenance and costs

Our high-quality membrane materials and post-production galvanized welded frames deliver durability over time, making the cost of maintaining Rubb buildings more economical compared to conventional structures.



Energy-efficient roof membranes

Translucent membranes allow natural daylight to illuminate the workspace while the white roof surface reflects heat. Thermohall® insulation can minimise heat transfer, prevents condensation and virtually eliminates thermal bridging and air infiltration.



Structure quality

All structures are code complaint, designed to meet wind and snow loadings of its geographical location. Rubb PVC fabric cladding has a manufacturer's warranty of 10 years. Steelwork is hot dip galvanized in post production to eliminate any chance of corrosion, and comes with a 25-year warranty.



Multiple door options

Rubb offers a variety of different hangar door solutions. They can be selected and designed to suit many size and opening requirements. This flexibility ensures that our clients get the best option for their selected Rubb building type, depending on their operational needs.



Complete environmental control

The membrane cladding of a Rubb building is continuously sealed to provide a weather-tight shell. The buildings can be insulated, heated or air-conditioned as required. Rubb structures are uniquely suited for use as dehumidified facilities.



Reduced time on-site

Our established supply chain streamlines coordination of delivery and installation. Pre-fabricated elements and the ability to construct our buildings in a variety of weather conditions speeds up the construction process.



Rapid construction, installation, and relocation

Rubb buildings can be quickly erected, dismantled and relocated due to module pre-fabrication. Rubb can provide site supervisors or fully dedicated construction teams to complete any custom project. Structures are transportable by land, sea and air.



Flexible and cost-efficient foundation systems

Rubb buildings can accommodate many foundation options such as concrete up-stand, ballast weights, and ground anchors into an existing surface. Rubb co-ordination with the groundwork contractor is key for the client to reach the most cost-effective solution.



Customisable features

Hangars can accommodate all types of door, ventilation and other systems. They can safely support high loads imposed by overhead cranes, ceiling-mounted HVAC and fire-suppression systems, fall-protection equipment and other superimposed loads.









Comprehensive long-term service

Rubb personnel are on hand to provide help and support, from initial contact and quotation, to installation and beyond. Rubb's commitment to customer service continues after project completion and forms the basis for long-term customer satisfaction.

Horizon

Al Ain International Airport, UAE

	Type EFASS		Span 23.5m
	Long 36m		Eaves 3.2m
	Apex 8m		Door Heli-Door



Rubb Buildings Ltd won an order to provide three 23.4m x 36m steel and aluminium hybrid EFASS helicopter maintenance hangars to Horizon Flight Academy.

The high flying academy is based at Al Ain International Airport and has been purpose built for flight training. It has set the benchmark for pilot training in the Middle East, offering fixed wing and helicopter pilot courses. Its fleet includes Cessna 172SP, Diamond DA42, Bell 206 and Bell 407 aircraft and flight simulators. The helicopter hangars will be used for the storage and maintenance of the fleet helicopters.

Rubb adapted the EFASS design to include mostly steel framework instead of aluminium to meet with stringent fire regulation codes in the UAE.









We chose Rubb for their reputation in design, development and deployment of temporary hangars. The installation of our hangars was speedy and efficient.

CEO, Horizon
Hareb Thani Hareb
Al Dhaheri

NPAS Bournemouth

Bournemouth Airport, UK

	Type BVE		Span 26m
	Long 17m		Eaves 7.5m
	Apex 11.4m		Door Heli-Door

The National Police Air Service needed a new helicopter hangar after moving its Dorset base from police HQ to Bournemouth Airport.

Rubb helped NPAS meet that requirement with a custom designed helicopter hangar. A Rubb Heli-Door in the front gable provides a clear opening of 21.5m wide x 5.5m high. The rear gable end includes a 4m x 4m roller shutter door and one personnel door. Each sidewall includes an additional personnel door for access and egress.

The Rubb BVE aviation structure features Rubb's traditional galvanized internal steel frame and a tapered lattice leg design. The building is clad with durable PVC Ferrari fabric, providing Sargaso blue walls and roof.



The facilities at the new hangar and base are excellent. It is an ideal location to operate from in order to service Dorset, Hampshire and the Isle of Wight.

NPAS Base Manager
**Sergeant
Neil Cartwright**



Bristow Group

Norwich, UK



Type
BVE



Span
35m



Long
40m



Eaves
6m



Apex
12m



Door
Sliding

Bristow Helicopter Group approached Rubb to design and manufacture a fabric engineered helicopter hangar, tailor-made for the company's needs.

During the process the structure grew from a 35m span x 35m long BVE into a 35m span x 40m long specialist helicopter hangar facility. This helicopter storage hangar required a high level of lighting specification, insulation and inner skin features and a custom-made insulated 20m x 6m manual sliding hangar door.

The high specification electrical system includes 230v and 415v power sockets; a 500 Lux lighting system; an independently monitored emergency lighting system; lightning protection and ventilation.









It was a real pleasure working with Rubb, and I cannot thank you enough for the excellent work that you have all put together for Bristow.

Area Manager,
Dapo Oyeleke



NHV

Wick John O'Groats Airport, Scotland

	Type EFASS		Span 20.4m
	Long 44m		Eaves 4.2m
	Apex 8.3m		Door Heli-Door

The storage and maintenance hangar will be used by NHV UK, which is part of the global NHV Group (Noordzee Helicopters Vlaanderen), a fast growing international helicopter service company with contracts all over the world.

NHV's aircraft storage facility from Rubb's Expeditionary Forces Aircraft Shelter System (EFASS) range features a span width of 20m x 44m long with a closed rear gable end. Access is via a 17.7m wide x 5.5m high Heli-Door. The door is electrically operated via two slow moving helical geared motors, with emergency hand operation capability. This system does not require a base foundation or ramps. The door goes up and down at the touch of a button. Locking and safety devices operate automatically.



NHV UK are very impressed with Rubb's professionalism, service and quality product, and would have no hesitation in using them for similar projects in the future.

Commercial Manager,
Colin Hancy



North Weald Airfield

Essex, UK



Type
BVL



Span
40m



Long
42m



Eaves
6m



Apex
9.5m



Door
Sliding



Rubb supplied a custom-designed solution for the National Police Air Service, situated in North Weald Airfield.

The 40m span x 42m long BVL will provide cover for police aircraft, and is fully relocatable if necessary. Easy access for aircraft is provided by a bespoke sliding door system, with pedestrian access to the sides.

The hangar features Rubb's durable steel framework, which is hot dip galvanized to protect from corrosion. The frame is fully covered with a high tenacity, flame retardant PVC-coated polyester fabric, which has a life expectancy of up to 25 years. The PVC cladding features two contrasting tones: blue walls, with a white roof.

Rubb was thrilled to continue this relationship with NPAS, especially with the chance to work somewhere with so much historical significance and importance to the local area. During WW2, the airfield was known as RAF North Weald and proved instrumental in the Battle of Britain. Today, North Weald connects people across England, as well as having destinations abroad.





Rubb's insulated cladding system

Rubb's patented Thermohall® features a flexible insulated fabric system which offers major advantages over other insulating systems:

- Non-combustible glass wool is encapsulated in air and water tight pockets
- Insulation thickness from 50mm to 150mm
- No air gaps in the cladding, which reduces heat loss and helps eliminate condensation
- Buildings are fully relocatable

Development of Thermohall® started several years ago, with the goal of a new and eco-friendly insulation system. Thermohall® is now fully developed and patented. Thermohall® offers great energy savings and is environmentally friendly—both in fabrication and operation.

- Rubb uses a heavy-duty PVC fabric with a long, useful life and high density, non-combustible glass wool insulation
- All the materials are recyclable. Steel can be recycled through various means and PVC can be recycled through initiatives which are part our operational supply chain and environmental partnerships. The insulation material that Rubb uses is processed from recycled glass
- Rubb Thermohall® structures combine the best properties of both conventional buildings and fabric buildings, high thermal insulation and full relocatability. All Thermohall® buildings can be delivered to suit our customers' insulation requirements



Thermohall® technical specification

Thickness	U Value (SI) W/m ² K	R Value (US) ft-F-hr/BTU
50mm (2in)	0.67 W/m ² K	R11
100mm (4in)	0.36 W/m ² K	R19
150mm (6in)	0.25 W/m ² K	R27

Outer layer

Flame retardant heavy-duty fabric

Inner layer

Self-cleaning PVC fabric

Core

High-density glass wool insulation



Rubb structures

Rubb has the capability and experience to design, manufacture, deliver and install custom structures.

With Rubb, you can be sure everything is under control from concept to completion—including cost, quality, and delivery.

While we generally have the right standard structure available to meet project needs, Rubb can also design custom solutions to meet special requirements. We have the in-house resources to provide a cost-effective solution customised to our clients' needs.



Design

Using proven engineering software, we can tailor the project to the specific requirements of the site, type of cargo and logistical needs.



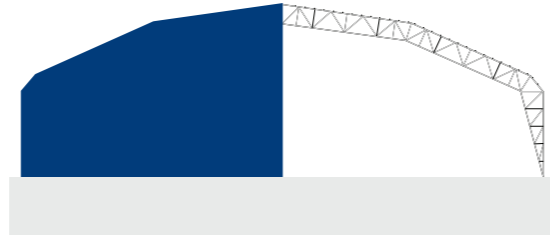
Production

Our steel and membrane components are fabricated with proper equipment and quality control.



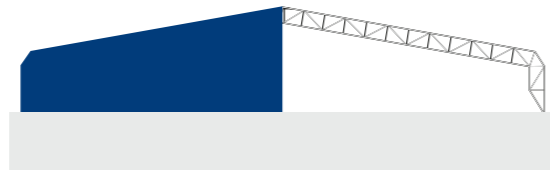
Installation

Pre-engineered and pre-fabricated to make on-site installation by a Rubb crew—or your crew—go smoothly and efficiently.



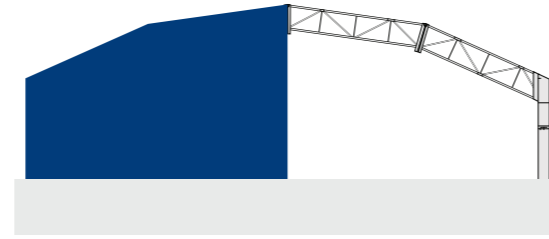
BVE

BVE structures feature lattice frame sidewalls and can be designed with single or multiple lattice roof pitches. 20m to 40m span widths, by any length.



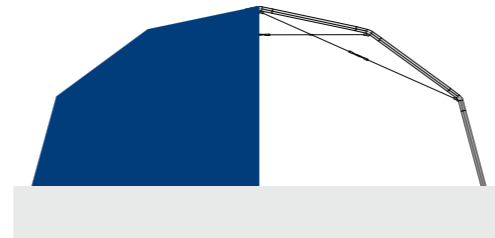
BVL

The BVL has vertical lattice frame sidewalls and single or multiple lattice roof pitches per span. Large spans start from 40m to 100m in width, by any length.



BVC

The BVC is designed with a vertical column leg and a lattice frame roof. This structure type offers a large clear internal area. 40m to 100m width spans are available.



EFASS

The EFASS hangar is designed for rapid deployment. Lightweight, robust and relocatable, these hangars are available in three widths (11m, 20.4m and 25m).

Twin span

Twin spans are more affordable than single roofs, due to the reduced amount of steel work. Dual and multi bay hangars also allow multiple storage and MRO operations to take place side-by-side, within the same building.

Hangar door options

Rubb offers a variety of different hangar door solutions.

They can be selected and designed to suit many size and opening requirements. This flexibility ensures that our clients get the best option for their selected Rubb building type, depending on their operational needs.

Rubb can also supply a wide range of access and industrial roller shutter doors.



Access door

These types of doors are suitable for public and non-public areas. EN 1125 and EN 179 standards apply to push bars and touch bars respectively. All doors and emergency exit doors supplied by Rubb adhere to European product standards. To meet customer requirements, all doors come with CE marking and are ISO 9001 approved.



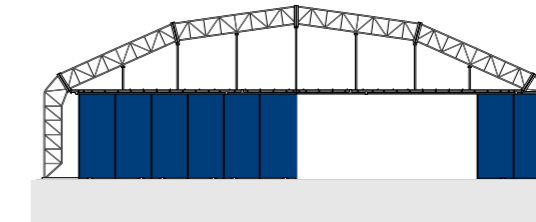
Roller shutter doors

Commercial off-the-shelf doors, measure up to 10m x 10m, but Rubb can also offer custom door sizes. All doors incorporate a motor driven system, with built in safety mechanisms. Doors can be electrically operated and can be combined with safety devices and traffic lights. All doors can be customised to suit business operations.



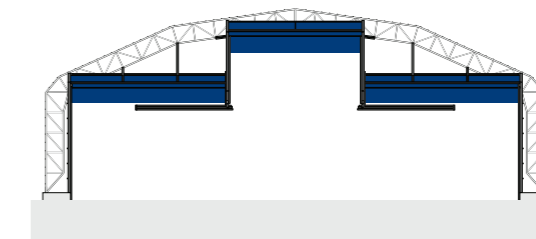
Heli-Door system

Designed to be quickly constructed, this vertically folding door is electrically operated via two helical geared motors, with emergency hand operation capability.



Sliding aircraft doors

This door is available in a variety of sizes to meet project requirements. These bottom rolling doors can be electrically or manually operated and insulated if needed.



Vertical lifting doors

These doors are cost-effective, reliable and help create a bright working environment. They can withstand high windloads and eliminate draughts when closed.

Rubb Buildings Ltd
246 Dukesway
Team Valley Trading Estate
Gateshead, Tyne & Wear
NE11 0QE, UK

✉ info@rubbuk.com
☎ **+44 (0)191 482 2211**
🌐 www.rubbuk.com



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