

▲ C.08012023 - / AttardBros Group

not **Only**  
buildings  
are **BUILT**

“  
To build a better tomorrow  
for our Planet, Customers, Employees,  
Business Partners, Shareholders  
and for the Communities in which we live  
”

*Michael Attard, Chairman*

Since 1977, we have been making our mark and developed long lasting relationships with our business partners based on mutual respect and trust. This strong network has enabled us to grow and achieve so much in a relatively short period of time. Our philosophy has always been to consistently promote quality, in what we do and also the way we do it. It has earned us the reputation we enjoy today. Our major strength lies in our people. It is they who, on a day-to-day basis, uphold our customer focus and quality standards. We look forward to the future with optimism and we intend to continue investing in the latest technology and to constantly innovate so as to offer superior solutions and greater value to our customers. Building a better tomorrow for our customers, employees, communities, shareholders and the planet is guiding our production and service practices throughout.



**Attard Bros**  
GROUP

# Sustainability, now!

Our commitment to contribute to the overall effort toward sustainable construction.

On a global level, the building and construction industries account for approximately 39% of carbon dioxide emissions annually (80% of total GHG – Green House Gas – emissions are a product of CO2).

Within the construction ecosystem, the two main contributors to the rise in GHG emissions are the raw materials used in infrastructure and building, and the lifetime operation of the building itself.

Our industry, dealing with the manufacturing and processing of construction materials, is estimated to account for around 30% of the industry's total annual carbon emission, predominantly coming from cement and steel production.

Building operations, due to the poor insulation and energy inefficiencies of existing buildings, account for the other 70%.

Early-stage design with sustainability in mind is the best way to reduce a building's lifetime GHG contribution and safeguard the value of the investment through time.

Through ongoing research and development, product innovation, international partnerships, the upcoming adoption of ISO14001:2015 and the pursuit of ambitious targets on our carbon footprint reduction, we are committed to increase our offering towards products and solutions that will contribute to address the climate's state of urgency.

# THE FUTURE

## about:

Shifting to a sustainable way of building includes: **conscious use of land** by making lighter and more efficient structures; **reusing what has already been built** by avoiding demolishing and rebuilding; **improving the energy performance** of existing houses by adopting insulation solutions; **reducing the use of non renewable energy** in production, limiting waste and using renewable energy; **reducing the use of raw materials** by increasing the use of recycled materials.

**Improved Energy Efficiency:**

Next generation insulating materials can improve the energy efficiency of your building without reducing the breathability of the walls. This can reduce your energy bills and help you to save money in the long run, while reducing humidity.

**Reduced Environmental Impact:**

Sustainable building materials have a minimal impact on the environment throughout their life cycle.

**Improved Indoor Air Quality:**

Many sustainable building materials, such as low-VOC paints and natural flooring materials, can improve indoor air quality.

**Increased Durability:**

Sustainable building materials are often more durable than traditional building materials. They require less maintenance and have a longer lifespan, which can save you money over time.

**Same aesthetics, but enhanced:**

Sustainable building materials can be used to keep a traditional look, while improving the building's energy performance.

# Towards a more conscious construction

Creating a resilient built landscape: how sustainable building materials can benefit your construction project.

The global demand for resilient housing and cities is expected to continue growing at a very fast pace.

As the world becomes more environmentally conscious, more people are turning to sustainable building materials for their construction projects. Sustainable building materials are environmentally responsible and resource-efficient. They are designed to reduce the impact on the environment throughout their life cycle, from the extraction of raw materials to their disposal and reuse.

Sustainable building materials are made from renewable resources and produced using renewable energy.

At Attard Bros, we are committed to supplying the construction market with a unique portfolio of evermore sustainable building materials and solutions, developed with our unique experience market knowledge and commitment to quality.



Quality architecture starts with quality materials. Since 1977 we have been producing building materials that meet and exceed market standards.

## Structural and lightweight. A strategic approach

When working on the extension of existing buildings, reducing the weight of structural elements is often critical.

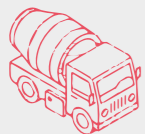
As an intrinsic part of our efforts towards a smarter and more sustainable way of doing construction, we have created a complete structural lightweight product line which includes all the basic components of construction most commonly found in our market: concrete, precast structural elements, and blocks to make load-bearing walls, and partitions. Due to the scarcity of land available for development, renovation of existing buildings is a growing market and an integral part of responsible land use. This often entails working in suboptimal structural conditions or on buildings with

foundation structures of limited capacity. Our specific line of structural lightweight products meets the most popular dimensional standards, quality and certified strength to ISO and BSI standards, but with up to 25% less weight. Lightweight means more efficient transportation, less labor and less potential for accidents on the construction site, less inert mass and less energy used during production. Whether they are loaded with low-density inert particles or based on aerated mixtures, Attard Bros structural lightweight solutions also have better thermal and soundproofing performance.

A quality building means comfortable and healthy spaces to live in.



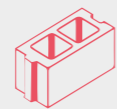
### Our complete line of structural lightweight products:



Concrete



Precast



Structural blocks

# 25%

**Of reduction in weight**  
Up to 25% in weight reduction is achieved with structural lightweight blocks, compared to a similar product in terms of technical characteristics and dimensions.

# 134%

**Improved thermal conductivity**  
for structural HCB and a remarkable  $\lambda=0.52$  for 9" structural lightweight HCB instead of  $\lambda=0.70$  for the 9" normal density HCB. We can also achieve a  $\lambda=0.85$  for structural lightweight concrete (1800Kg/m<sup>3</sup>).





# Structural Lightweight Solutions

## Lightweight concrete

Great structural performance for your projects with less weight and a reduced environmental impact.

From our experience in the production of cementitious agglomerates comes the new structural lightweight concrete as part of our structural lightweight solutions.

Our various types of lightweight concrete are mixes based on our proven and tested formulations, whereby a variable portion of the natural aggregate is replaced by expanded clay aggregates from sustainable sources hence reducing the mass density.

The main advantage achieved from the use of this technology is the weight reduction of the structural components resulting in a reduction in shear and bending load on horizontal elements, lower load on the foundations and lower axial load on pillars with increased ductile response of the structures. This product is ideal when carrying out interventions on existing buildings, when interfacing with load-bearing elements with re-

duced strength, but also with any other kind of elevated construction in which a section of the structural elements can be reduced resulting in an increase of the usable surface area.

In structures where self-weight is the predominant component of operating loads (long-span bridges, roof structures, large precast panels, slabs with large spans, etc.) the use of structural lightweight concrete allows for leaner structures with smaller cross sections and thus smaller amounts of concrete and reinforcement. The result is a more economical and aesthetically pleasing building. The advantages are not only structural. The use of expanded

materials contributes to a more sustainable construction by reducing the quantity of raw materials obtained from quarries.

By way of example, in the case of our expanded clay aggregates, across the production cycle we obtain 3m<sup>3</sup> of aggregate from every one m<sup>3</sup> of raw material (natural clay). The raw materials we use as well as the entire production cycle follows ISO 14001:2004 standards. As an integral part of our commitment to reducing our carbon footprint in production, the entire production cycle, from aggregate processing to concrete mixing, is done primarily using locally produced energy from renewable sources.

### 12%

**Quarrying reduction** With the use of expanded clay aggregates, the reliance on natural materials from quarries is significantly reduced.

### 23%

**Less weight per m<sup>3</sup>** of concrete in the case of nonstructural products and up to 17% for C25/28 structural concrete.

Using our lightweight concrete, you are not only using a smart material, but also a sustainable one. The entire production cycle of the expanded clay aggregates we use is developed using the best available technologies, and has obtained the environmental product declaration (EPD) required for LEED and BREEAM certifications.

### 90%

**Of energy used in the production process** of our structural lightweight concrete, is coming from renewable and sustainable sources.





# Structural Lightweight Solutions

## Lightweight precast

In our lightweight precast products, the benefits associated with and lightweight are further enhanced.

With precast elements lightweight is key. Using lighter precast elements allows for a leaner construction resulting in a better gross to net area ratio. These aspects are most important when renovating or extending existing buildings. Renovation work involves floors, pillars, bearing walls, curbs, slabs, stairs, bracketed structures, useful to lighten so as not to over encumber pre-existing structures and foundations.

The lightweight concrete we use to produce this specific family of precast elements, helps to achieve a significant reduction in concrete own-weight of up to 1 ton per m<sup>3</sup>, while achieving the equivalent mechanical strength making greater

incidental loads or useful overloads available.

Whether homogeneous or mixed (eg. part prefabricated and part block or part prefabricated and part cast in-situ), a structure with lower mass will have lower impact on load-bearing structures, which are also stressed by lower bending moments and shear forces, thus optimizing structure and reinforcement.



We produce all kinds of precast elements: both standard and custom-designed parts, for all kinds of civil or industrial applications.

### 22%

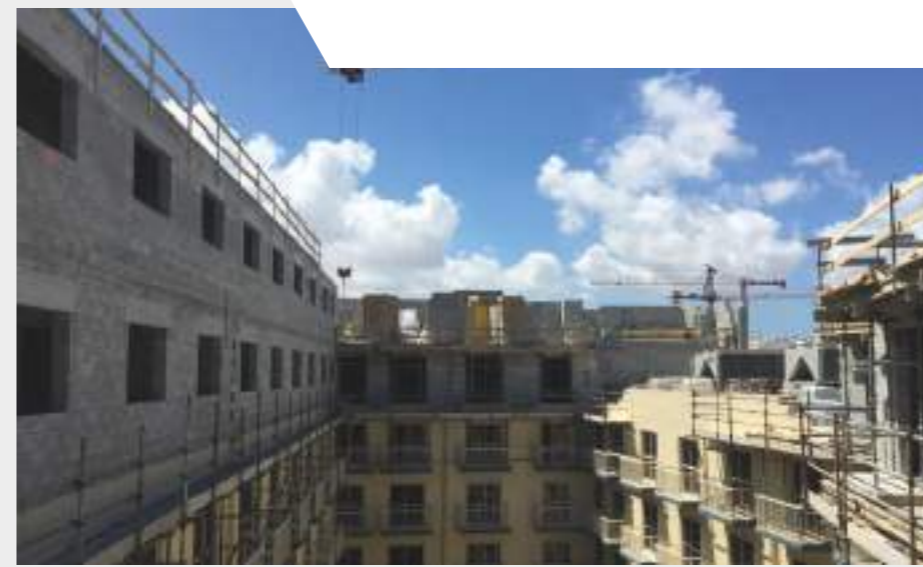
Less weight than a traditional lintel with the same strength. Dimensions and quality standards remain the same as our normal density products.

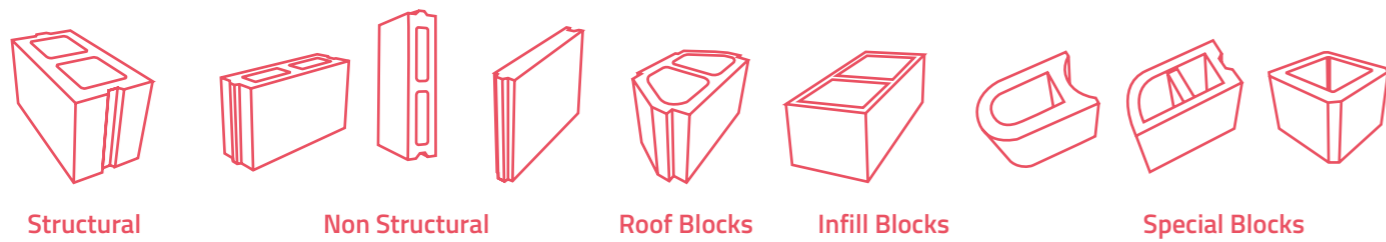
### QUALITY

**Guaranteed as always**  
Our precast products are manufactured following the highest quality standards. The expanded clay aggregates used for our lightweight products comply with the EN 13055-1:2016 and have CE marking also with regards to consistency in technical performance according to NTC 2018. Our precast products are guaranteed and we put our stamp on them.

### 75%

More material hauled in a single shipment. Less transportation means less impact on the environment, less costs and less time spent.





# Blocks

High performance products for both residential and commercial use.

With two lines of production, the plant produces an average of 25,000 bricks per day and boasts offering the widest variety of concrete blocks in Malta. These include, load bearing and non-load bearing hollow concrete masonry blocks, blocks for wall partitions, structural lightweight blocks, insulated blocks, coping stones, roofing blocks, kerb stones and interlocking concrete paving blocks.

In order to meet the demand of the construction industry becoming increasingly conscious about sustainability, we have developed a specific line of structural and non-structural lightweight blocks and, as standard, up to 30% of aggregates present in our normal density blocks are recycled as certified by our suppliers. We can also offer 100% recycled blocks.



**Improved insulation performance** for uncompromising building quality that is longer lasting, healthier, and maintains value over time



**A more environmentally friendly construction:** reduction of quarrying, Use of locally produced energy for production, traceability of the supply chain.



**Lighter construction materials** allow a more sustainable use of land, lower environmental impact of transportation, increased handling, reduced risk of accidents on the construction site.



## EQUAL YET DIFFERENT

Perfectly equal in size to the normal density blocks, the structural **lightweight** versions are about 22% lighter and 3% stronger, also resulting in improved energy performance for the building."

Our normal density block made with 100% **recycled aggregates**, from certified sources. They are available in all standard sizes and are available as both structural and non-structural.

With a production of over 6 million blocks per year, our **normal density blocks** represent a benchmark in the market in terms of reliability and are one of our flagship products. Now more sustainable too, since they are made with up to 33% recycled aggregate.

## QUALITY

Quality and consistency of the production in terms of performance, shape and dimensions are guaranteed using the most recent machinery made in Germany, which allows to maintain highest standards all along the process.



## CE MARKED

CE marking guarantees you the full traceability of the ingredients their performance and information about the supplier.

**6,000,000**

Is the average number of blocks we produced per year.





# Concrete Blocks



Model	Dimensions			Configuration	Typical dry weight (1pcs)	Infill volume	Mean compressive strength	Shear bond strength	Block Density	Concrete density	Typical water absorption	Moisture movement	Water vapour permeability	Typical Thermal Conductivity	Reaction to fire	Notes	
	W	L	H														
	EN 772-16			EN 1996-1-1			EN 772-1	EN 998-2	EN 772-13	EN 772-13	EN 772-11	EN 1996-1-1	EN 1745	EN 1745			
	mm				kg	cm <sup>3</sup>	N/mm <sup>2</sup>	N/mm <sup>2</sup>	kg/m <sup>3</sup>	kg/m <sup>3</sup>	g/m <sup>3</sup>	mm/m	μ	W/mK (10,dry Mat)	Euroclass		
Structural lightweight HCB	6"	145	450	255	hollow group/2	18.0	5489.640	6	0.15	1030	1500	12.5	-0.1 to -0.2	5 / 15	0.53	A1	
	7"	173	450	255	hollow group/2	21.0	5319.300	6	0.15	1120	1490	12.5	-0.1 to -0.2	5 / 15	0.50	A1	
	9"	220	450	255	hollow group/2	22.0	10296.135	6	0.15	800	1289	12.5	-0.1 to -0.2	5 / 15	0.52	A1	
Non-structural lightweight HCB	4"	100	450	255	hollow group/2	12.0	3665.200	2	-	730	1070	21	-	5 / 15	0.33	A1	
	6"	145	450	255	hollow group/2	14.0	5489.640	2	0.15	680	990	21	-	5 / 15	0.27	A1	
	7"	173	450	255	hollow group/2	17.0	5319.300	3	0.15	760	1020	21	-	5 / 15	0.28	A1	
	9"	220	450	255	hollow group/2	19.0	10296.135	3	0.15	600	980	21	-	5 / 15	0.36	A1	
Normal density non-structural HCB	2.5"	60	450	255	hollow group/1	13.0	-	3	-	1700	1700	12	-0.6 to -0.1	5 / 15	0.75	A1	Also available as 100% recycled
	4"	100	450	255	hollow group/2	15.0	3665.200	5	-	1100	1700	12	-0.6 to -0.1	5 / 15	0.49	A1	Also available as 100% recycled
Normal density structural HCB	6"	145	450	255	hollow group/2	24.0	5489.640	6	0.15	1250	1850	12	-0.6 to -0.1	5 / 15	0.59	A1	
	7"	173	450	255	hollow group/2	27.0	5319.300	6	0.15	1350	1850	12	-0.6 to -0.1	5 / 15	0.63	A1	
	9" SD	220	450	255	hollow group/2	31.0	10296.135	6	0.15	1100	1800	12	-0.6 to -0.1	5 / 15 - 30 / 100	0.70	A1	
	9" DD	220	450	255	hollow group/2	38.0	13525.200	7	0.15	1350	1800	12	-0.6 to -0.1	5 / 15	0.68	A1	
Solid Concrete Blocks	4"	100	450	255	hollow group/1	23.0	-	5	-	1800	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
	6"	145	450	255	hollow group/1	31.5	-	6	0.15	1800	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
	7"	173	450	255	hollow group/1	33.0	-	6	0.15	1800	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
	9"	220	450	255	hollow group/1	49.0	-	7	0.15	1800	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
Infill Blocks	300DC	300	450	255	hollow group/2	27.0	19247.400	2	0.15	784	1943	11.5	-0.6 to -0.1	5 / 15	0.90	A1	
	230SC	300	450	255	hollow group/2	24.8	22799.040	2	0.15	721	1896	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
Roof Blocks	6"	152	390	255	hollow group/2	18.5	-	6	0.15	1100	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
	8"	200	410	255	hollow group/2	22.8	-	6	0.15	1100	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
	10"	250	340	255	hollow group/2	21.0	-	6	0.15	1100	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
Special Blocks	230 Round	220	450	255	hollow group/2	26.0	7327.680	6	0.15	1100	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
	9"curved wall	220	350	255	hollow group/2	19.0	5833.125	6	0.15	1100	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	
	Chimney	350	350	260	hollow group/2	30.0	-	3.2	0.15	1000	1800	11.5	-0.6 to -0.1	5 / 15	0.82	A1	Also available in colour
	PV Couter-weight	400	400	100	-	32.0	-	20	-	2050	1800	10	-	5 / 15	-	A1	

All dimensional tolerances according to CAT. D1 (EN 771-3)  
All the blocks except for the lightweight and structural lightweight blocks are also available with 100% recycled aggregates.



# AAC Blocks



Model	Dimensions			Configuration	Typical dry weight (1pcs)	Typical Block dry density	Mean compressive strength	Cross-sectional compression strength	Typical wall dry density	Moisture movement	Water vapour permeability	Typical Thermal Conductivity	Soundproofing capacity	Reaction to fire	Notes	
	W	L	H													
	EN 771-4			EN 771-4	kg ± 5%	kg/m³ ± 50	EN 1996-1-1	EN 1996-1-1	EN 771-4	EN 771-4	EN 771-4	EN 1745	EAACA	Euroclass		
	mm						N/mm²	N/mm²	kg/m³ ± 60	mm/m $\epsilon_{cs,ref}$	$\mu$	W/mK (10, dry Mat)	dB			
Sismic structural AAC Blocks	SYS24L	240	600	250	Group 1	20.9	500	5.0	4.5	700	≤ 0.06	5 / 10	0.13	50	A1	With tongue/groove joint
	SYS30L	300	600	250	Group 1	26.1	500	5.0	5.0	700	≤ 0.06	5 / 10	0.13	50	A1	With tongue/groove joint
Sismic Hydro structural AAC Blocks	HySYS24	240	600	250	Group 1	20.9	580	5.0	4.5	700	≤ 0.04	5 / 10	0.13	50	A1	As the Sismic but hydrophobized
	HySYS30	300	600	250	Group 1	26.1	580	5.0	5.0	700	≤ 0.04	5 / 10	0.13	52	A1	As the Sismic but hydrophobized
	HySYS37	375	600	250	Group 1	32.6	580	5.0	5.0	700	≤ 0.04	5 / 10	0.13	54	A1	Hydrophobized
	HySYS40*	400	600	250	Group 1	34.8	580	5.0	5.0	700	≤ 0.04	5 / 10	0.13	55	A1	Hydrophobized - Available on request
Evolution structural AAC Blocks	EVO5L	50	600	250	Group 1	3.6	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	38	A1	To be used as joint cover
	EVO8L	80	600	250	Group 1	5.7	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	38	A1	Also available with tongue/groove joint
	EVO10L	100	600	250	Group 1	7.1	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	40	A1	Also available with tongue/groove joint
	EVO12L	120	600	250	Group 1	8.5	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	41	A1	Also available with tongue/groove joint
	EVO15L	150	600	250	Group 1	10.6	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	43	A1	Also available with tongue/groove joint
	EVO20L	200	600	250	Group 1	14.2	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	46	A1	Also available with tongue/groove joint
	EVO24L	240	600	250	Group 1	17.0	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	48	A1	Available with tongue/groove joint on request
	EVO30L	300	600	250	Group 1	21.2	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	50	A1	Available with tongue/groove joint on request
	EVO35L	350	600	250	Group 1	24.8	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	52	A1	Available with tongue/groove joint on request
EVO40L	400	600	250	Group 1	28.3	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	53	A1	Available with tongue/groove joint on request	
Evolution Hydro structural AAC Blocks	HyEVO8*	80	600	250	Group 1	5.8	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	38	A1	Available on request
	HyEVO10*	100	600	250	Group 1	7.2	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	40	A1	Available on request
	HyEVO12*	120	600	250	Group 1	8.6	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	41	A1	Available on request
	HyEVO15*	150	600	250	Group 1	10.5	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	43	A1	Available on request
	HyEVO20	200	600	250	Group 1	14.4	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	46	A1	Available on request
	HyEVO24	240	600	250	Group 1	17.3	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	48	A1	Available with tongue/groove joint on request
	HyEVO30	300	600	250	Group 1	21.6	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	50	A1	Available with tongue/groove joint on request
	HyEVO35	350	600	250	Group 1	21.2	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	50	A1	Available with tongue/groove joint on request
	HyEVO37	375	600	250	Group 1	27.0	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	52	A1	Available with tongue/groove joint on request
	HyEVO40	400	600	250	Group 1	28.8	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	53	A1	Available with tongue/groove joint on request
	HyEVO45	450	600	250	Group 1	32.4	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	54	A1	Available with tongue/groove joint on request
HyEVO50	500	600	250	Group 1	36	480	4.8	3.3	600	≤ 0.06	5 / 10	0.11	55	A1	Available with tongue/groove joint on request	

All dimensional tolerances according to EN 771-4 cat. I  
All blocks to be considered as Group Element 1 according to EN 1996-1-1.



# AAC Blocks



Model	Dimensions			Configuration	Typical dry weight (1pcs)	Typical Block dry density	Mean compressive strength	Cross-sectional compression strength	Typical wall dry density	Moisture movement	Water vapour permeability	Typical Thermal Conductivity	Soundproofing capacity	Reaction to fire	Notes	
	W	L	H													
	EN 771-4			EN 771-4	kg ± 5%	kg/m³ ± 50	EN 1996-1-1	EN 1996-1-1	EN 771-4	EN 771-4	EN 771-4	EN 1745	EAACA			
	mm						N/mm²	N/mm²	kg/m³ ± 60	mm/m $\epsilon_{cs,ref}$	$\mu$	W/mK (10,dry Mat)	dB	Euroclass		
Acoustic non structural AAC Blocks	ACU8L	80	600	250	Group 1	7.6	630	5.4	3.8	670	≤ 0.042	5 / 10	0.16	40	EI 60	
	ACU10L	100	600	250	Group 1	9.5	630	5.4	3.8	670	≤ 0.042	5 / 10	0.16	42	EI 60	
	ACU12L	120	600	250	Group 1	11.3	630	5.4	3.8	670	≤ 0.042	5 / 10	0.16	44	EI 60	
Active non structural AAC Blocks	ACTSL	50	600	250	Group 1	2.3	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	32	A1	To be used as joint cover
	ACT30M	300	600	250	Group 1	13.3	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	46	A1	Only vailable with tongue/groove joint
	ACT35M	350	600	250	Group 1	15.5	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	47	A1	Only vailable with tongue/groove joint
	ACT37M	375	600	250	Group 1	16.6	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	48	A1	Only vailable with tongue/groove joint
	ACT40M	400	600	250	Group 1	17.7	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	49	A1	Only vailable with tongue/groove joint
	ACT45M	450	600	250	Group 1	19.9	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	50	A1	Only vailable with tongue/groove joint
Energy non structural AAC Blocks	ACT50M	500	600	250	Group 1	22.1	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	51	A1	Only vailable with tongue/groove joint
	ENE10L	100	600	250	Group 1	5.3	350	2.6	1.8	450	≤ 0.06	5 / 10	0.08	37	A1	To be used as joint cover
	ENE24M	240	600	250	Group 1	12.4	350	2.6	1.8	450	≤ 0.06	5 / 10	0.08	45	A1	Only vailable with tongue/groove joint
	ENE30M	300	600	250	Group 1	15.5	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	47	A1	Only vailable with tongue/groove joint
	ENE35M	350	600	250	Group 1	18.1	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	49	A1	Only vailable with tongue/groove joint
	ENE37M*	370	600	250	Group 1	19.4	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	49	A1	Available on request
ENE40M*	400	600	250	Group 1	20.7	300	2.0	1.4	400	≤ 0.06	5 / 10	0.07	50	A1	Available on request	

All dimensional tolerances according to EN 771-4 cat. I  
All blocks to be considered as Group Element 1 according to EN 1996-1-1.





# Innovative Solutions Green concrete

Expertise and a level of service allowing us to meet your most demanding needs, even in reducing CO2 emissions in your building process.

With our 2 batching plants and 7 silos, we are able to offer a wide variety of concrete products (both wet and dry) with any grades required. With an annual production capacity of well over 150,000 cubic meters of concrete, this is undoubtedly one of our flagship products. With a vision of a more sustainable future, we have taken on the challenge of producing and launching the first and only green concrete solution on the Maltese market – a line of cementitious products that can tangibly reduce the carbon footprint in the building industry. Green concrete is our answer to the changes in a rapidly expand-

ing market, requiring sustainable construction with a low impact on the environment. The result of Attard Bros Group's expertise and research, green concrete is an innovative mix that uses cement of CEM III grade and achieves a 29% reduction in CO2 emissions in comparison with standard concrete mixes (CEM I). It is an initiative which yields results in CO2 reduction equal to the annual absorption of 253 trees for every 10 cubic meters of concrete. It can be used in any kind of construction, from buildings to infrastructure and residential projects and is handled in the same way as traditional concrete.

**Our latest project** done using our Green Concrete: For the renovation project of the HSBC Building in Qormi, we used 700m<sup>3</sup> of green concrete which has resulted in a reduction of CO2 emissions by 29%, equivalent to the amount of CO2 absorbed by 3,300 trees in one year.



## BENEFITS

Our green concrete reduces the exothermic reaction when hydration takes place. This will reduce thermal cracks effectively in high heat environments.

## FEATURES

Green concrete is easy to use and place and is suitable for pumping, thanks to a slightly longer setting time that depends on the water/cement ratio and temperatures. This allows the cement to remain workable for longer periods.

## APPLICATIONS

Our green concrete is suitable for a large range of applications, such as foundations and any other kind of structural elements including suspended slabs, pillars and ground floor slabs. It can also be used to produce hard landscaping elements.

With a production capacity of 150 Cubic meters per hour, there is no project we cannot support. Through our fully trained team of concrete experts, we provide technical consultancy for special formulation, and with, in stock, concrete additives of all types: retarders, super plasticizers, accelerants. We are also able to supply in short time large volumes, providing full service our unique and exclusive service of tracking via smartphone app.



A modern style with seamless floors complements traditional architecture. Our materials allow you to work effectively both in the construction of new buildings and on interventions of existing buildings.

# Smart building Solutions Screeds

From our experience in cementitious products, a complete line of screeds for residential and commercial uses.

Contemporary construction needs have introduced the use of screed in replacement of traditional systems, with multiple benefits. These mainly include the rapid execution and the possibility of obtaining a perfectly levelled and compact surface to accommodate any kind of finish, from large format tiles to resins. Screeds, once only used in large commercial or industrial projects, have now found their way in residential construction.

The possibility of formulating screeds with different technical, structural and physical properties (fiber-reinforced, self-levelling), makes it possible to provide a

solution to various problems, even in the field of building renovation where it is necessary to create underfloor layers that cooperate with the load-bearing structures or that ensure better redistribution of loads on the layers underneath.

This construction technique allows large systems, such as drains or electrical installations, or systems distributed in capillarity over the entire surface (heating coils), to be placed within the layer without compromising the structural continuity of the screed itself. For surfaces which are not perfectly flat, such as floors in old buildings, the use of self-levelling screeds can compensate for differences in levels.



## VERSATILITY

Screed can be bonded to a concrete base or, alternatively, can be placed directly onto a damp proof membrane. It works well on underfloor heating projects which require cast-in pipes. Screed is strong but can be further reinforced by adding steel mesh, or by mixing it with polypropylene fibres.





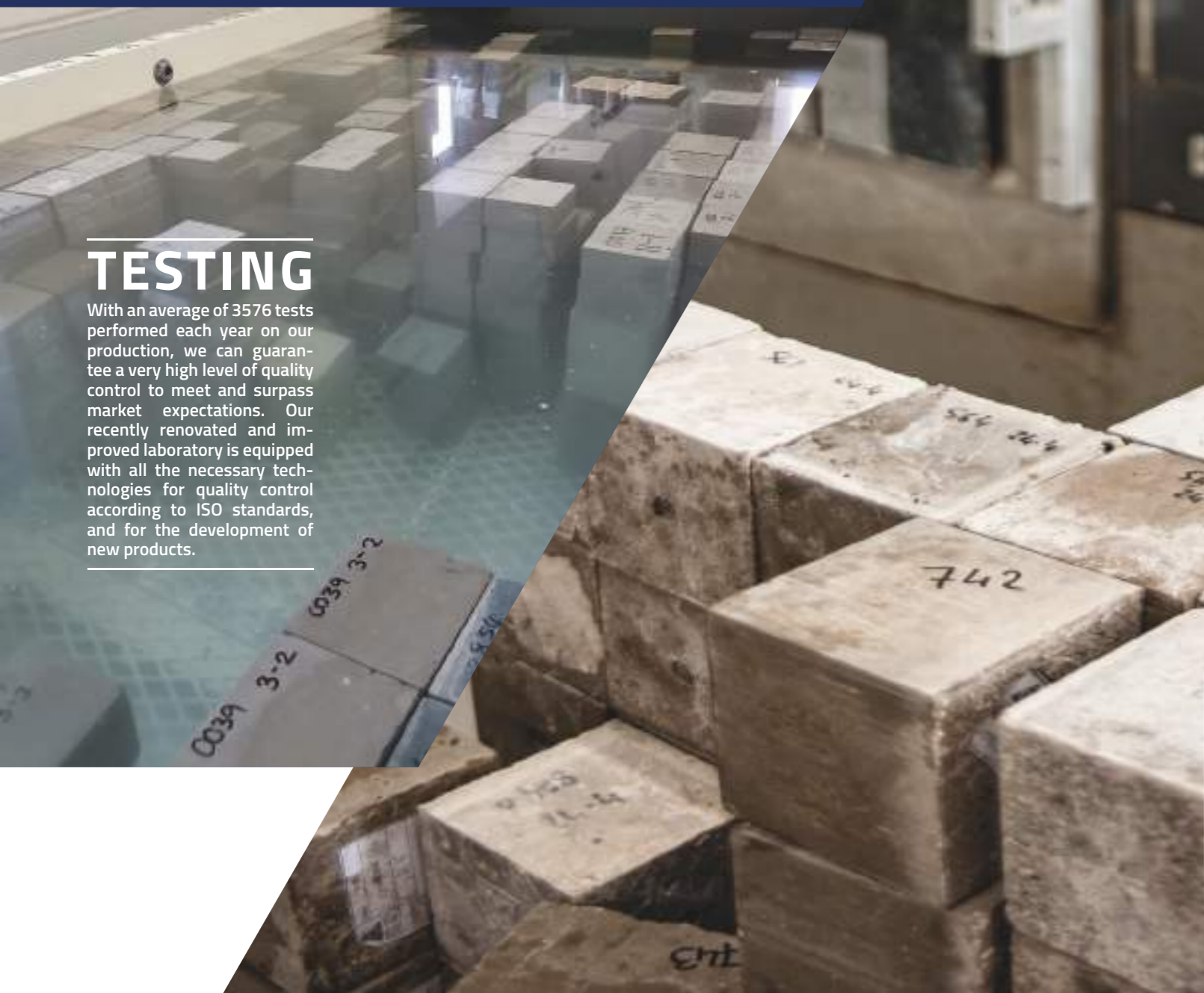
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9001:2015

## TESTING

With an average of 3576 tests performed each year on our production, we can guarantee a very high level of quality control to meet and surpass market expectations. Our recently renovated and improved laboratory is equipped with all the necessary technologies for quality control according to ISO standards, and for the development of new products.



# Quality is never a coincidence

It is the result of sincere and organised effort to deliver the best.

As a leading company we uphold ethical and quality values as a global vision and are committed to producing certified quality products. To us, the concept of quality comes through continuous training, networking, and research. The focus of quality control is not only the verification of regulatory or contractual standards, it includes a continuous optimization process, which is at its strongest when developing innovative materials. All production processes are carried out according to strict quality standards, and products are thoroughly tested under the supervision of the Quality Assurance Department in our building materials testing laboratory. There has recently been a major economic investment to improve its infrastructure and equipment so as to further increase its ability supporting us in the development of new products. Our construction materials manufacturing arm is ISO 9001:2015 certified. This standard sets the criteria for a QMS and is based on a number of quality management principles which include a strong customer focus, leadership, employee engagement, a risk-based process approach, a systematic approach to management, factual decision-making, relationship management and continuous improvement.

Certified quality and continuous innovation, the elements of our success.


## Materials, equipment and solutions for Building a better **Tomorrow**


Family-owned company, Attard Bros Group offers a flexible and comprehensive solution to address the needs of professionals and consumers for their construction projects. From manufacturing of construction materials to distribution of an extensive range of quality tools, equipment and material for professionals, home owners and DIY enthusiasts, including contracting services, real-estate developments and joinery, we have built our reputation on our expertise and an absolute commitment to quality.

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### Genesis of a cover:

The title design follows the standard we use to mark our certified products that comply with our quality control program. When you find a structural product that is coded with a number and the pyramid logo, you will know that it is one of our certified products.

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