

**BIRAT
BUSINESS
HOUSE**

ROAD SAFETY ROAD MARKING CONSTRUCTION



ABOUT US

YOUR TRUSTED PARTNER IN CONSTRUCTION

At **Birat Business House**, we're committed to providing top-quality construction materials that meet the highest industry standards. With a strong focus on quality and customer satisfaction, we've established ourselves as a leading supplier in the market. As a leading supplier of Construction & Road Safety materials, we offer a comprehensive range of products to meet the diverse needs of the construction industry. Our product portfolio includes high-quality building materials, robust road construction materials, and state-of-the-art road safety equipment.

OUR PRODUCT RANGE:

- 1. Thermoplastic Road Marking Paint:** Our very own manufacturing of High grade Thermoplastic Road Marking Paint.
- 2. Road Safety Equipment:** A comprehensive range of safety products.
- 3. Crash Barriers:** Ensuring safety on our roads.
- 4. AAC Blocks:** Lightweight and durable, perfect for modern construction.

Birat Business House's Strengths



Quality Assurance

Ensuring the highest standards in all products.



Timely Delivery

Prompt and reliable delivery of orders.



Expert Guidance

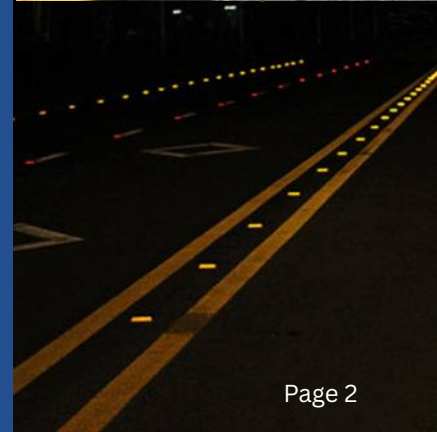
Knowledgeable team providing assistance.



Competitive Pricing

Offering quality at affordable prices.

LET'S BUILD A STRONGER & SAFER NEPAL TOGETHER.





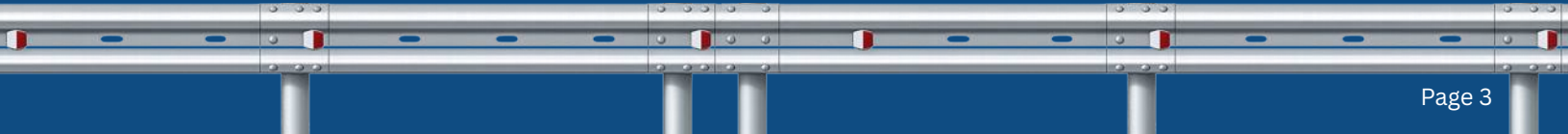
W BEAM METAL CRASH BARRIER



We offer **W Beam Metal Crash Barrier** conforming of all standard & specifications prevailing in the Road Infrastructure segment.

Single Side Single Beam: 3mm / 3.43mm section having width of 312mm and depth of corrugation at 83mm, hot dip galvanised of zinc coating, total length of 4.318 M with 318mm overlap (effective length 4M) as per Government of Nepal, Ministry of Physical Infrastructure & Transport Department of Roads (Nepal Road Standard - NRS 2070), and Indian Standard IRC as per MORT&H (Ministry of Road, Transport & Highways).

Description	Thickness (MM)	Length (MM)	Quantity
W-Beam Width	3.00	4320	1
U- Post 150 x 75 mm	5.00	1800	2
Spacer 150 x 75 mm	5.00	330	2
Nuts & Bolts (Button Head & Hexagonal)	-	35	14



SAFEMARK

RETROREFLECTIVE THERMOPLASTIC ROAD MARKING PAINT

Safemark Retroreflective Thermoplastic Road Marking Paint is designed for durable, high-visibility road marking applications across highways, city roads, municipal roads, industrial areas, parking areas, and project sites.



PRODUCT DETAILS

Product Type	Retroreflective Thermoplastic Road Marking Paint
Colors	White and Yellow
Packing	25 kg bags
Application Thickness	1 mm to 3 mm
Application Temperature	180°C to 200°C
Drying Time	Approx. 3–5 minutes
Standards Reference	Nepal Road Standard, BS, MORTH compatible
Suitable For	Highways, city roads, municipal roads, industrial areas, parking areas, project sites



KEY BENEFITS

	Bright white and yellow finish
	Strong adhesion
	Smooth melting and flow
	High intermix glass bead content
	Better bead holding
	Reduced cracking tendency
	Suitable for heavy traffic conditions



Safemark Road Solution Pvt. Ltd.
Biratnagar, Nepal



Trusted by Contractors.
Preferred for Performance.



**SAFER ROADS.
STRONGER FUTURE.**

WHY ROAD MARKING QUALITY MATTERS

High-quality road markings are essential for safety, visibility, and long-term performance. They guide traffic, improve road discipline, and reduce confusion in day and night conditions. Reliable marking quality supports safer movement and better road efficiency.

ROAD MARKING PERFORMANCE DEPENDS ON:



FACTORS THAT DEFINE QUALITY

High Visibility	Bright, reflective markings for clear visibility in all conditions
Strong Adhesion	Superior bonding with the road surface to resist wear and tear
Durability	Resists UV, rain, abrasion and heavy traffic load
Retroreflectivity	Returns light to the driver for better night-time visibility
Skid Resistance	Maintains friction and road safety in wet conditions
Consistent Application	Uniform thickness and accurate placement for reliable performance
Cost Efficiency	Longer life and lower maintenance for better value



QUALITY TODAY. SAFETY EVERYDAY.

Durable road markings deliver guidance, reduce risk and stand the test of time.



WHY IT MATTERS

-  Guides traffic and prevents confusion
-  Reduces accidents and saves lives
-  Performs in all weather and light conditions
-  Supports smooth traffic flow and efficiency
-  Lowers maintenance and life-cycle cost
-  Meets standards and ensures compliance



WHY CONTRACTORS CHOOSE SAFEMARK

Safemark Thermoplastic Road Marking Paint delivers consistent performance and reliability on every project. Engineered for strong adhesion, high retroreflectivity, and long-lasting results — even under heavy traffic and tough conditions.



HIGH BINDER CONTENT

Stronger bond and better durability.



POLYMER-MODIFIED BINDER SYSTEM

Enhanced performance and longevity.



HIGH INTERMIX GLASS BEAD CONTENT

Better retroreflectivity and night visibility.



DROP-ON BEAD COMPATIBILITY

Works seamlessly with drop-on beads.



BRIGHT WHITE FINISH

High visibility in day and night.



SMOOTH MELTING AND FLOW

Easy application with uniform finish.



BETTER BEAD HOLDING

Reduced bead loss and scuffing.



HEAVY TRAFFIC SUITABILITY

Built to perform on busy roads.



APPLICATION PROCESS



1. SURFACE PREPARATION

Clean the surface thoroughly to remove dust, dirt, oil and loose particles.



2. MATERIAL APPLICATION

Apply thermoplastic material using road marking machine at 180°C to 200°C.



3. GLASS BEAD APPLICATION

Apply glass beads (intermix and drop-on) for maximum retroreflectivity.



4. COOLING & SETTING

Allow the marking to cool and set for strong bonding and durability.



5. READY FOR TRAFFIC

The marking is ready to perform and deliver high visibility and safety.

BUILT FOR ROADS. MADE FOR PERFORMANCE.

Safemark ensures every line you mark is clear, durable, and reliable. Our products are trusted by road contractors and municipalities across Nepal for consistent results on every project.



Safemark Road Solution Pvt. Ltd.
Biratnagar, Nepal



Trusted by Contractors.
Preferred for Performance.



SAFER ROADS.
STRONGER FUTURE.

COMPLETE ROAD MARKING SOLUTION

Machines. Glass Beads. One Trusted Partner.



Reliable
Equipment



Premium
Materials



High Visibility
Performance



Strong After-Sales
Support



SMMM012

HAND PUSH THERMOPLASTIC ROAD MARKING MACHINE



SPECIFICATIONS

- ▶ Stainless steel 204 construction
- ▶ Manual hand push machine
- ▶ Dual dispenser boxes:
10 cm and 15 cm
- ▶ Paint tank capacity: 100 kg
- ▶ Glass bead capacity: 12 kg

SMMB018

THERMOPLASTIC ROAD MARKING BOILER

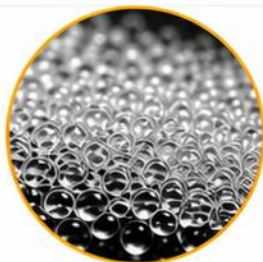


SPECIFICATIONS

- ▶ 300 liter capacity
- ▶ 4-layer jacket construction
- ▶ Stainless steel +
MS insulated body
- ▶ Engine power: 8 HP
- ▶ Total system weight: 450 kg

SAFESHINE DROP-ON GLASS BEADS

Safeshine drop-on glass beads
deliver high reflectivity and
excellent visibility on road markings.



KEY BENEFITS

- High Reflectivity
- Better Visibility
Day & Night
- Uniform Size
& Roundness
- Strong Bonding
With Marking

HIGH REFLECTIVITY BS 6088 TYPE B COATED

Engineered to meet BS 6088 Type B
coated standard for superior
retroreflective performance
and consistent quality.



Safemark Road Solution Pvt. Ltd.
Biratnagar, Nepal



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Preferred for Performance.



SAFER ROADS.
STRONGER FUTURE.

ROAD STUDS/CATS EYE ALUMINIUM



BBH - 100P

- Dimensions : 100x100x20mm
- Direction : Two way Reflective
- Colour : Yellow / Red



BBH - 100S

- Dimensions : 100x100x20mm
- Direction : Two way Reflective
- Colour : Yellow / Red



BBH - 112P

- Dimensions : 100x100x20mm
- Reflection : PPMA Reflector
- Colour : Yellow / Red / White



BBH - 112S

- Dimensions : 100x100x20mm
- Reflection : PPMA Reflector
- Colour : Yellow / Red / White



ROAD STUDS/CATS EYE ABS PLASTIC



BBH - ALPHA-P

- Dimensions : 100x88x15mm
- Direction : Two way Prismatic Reflective
- Colour : Yellow / Red / White



BBH - ALPHA-S

- Dimensions : 100x88x15mm
- Direction : Two way Prismatic Reflective
- Colour : Yellow / Red / White



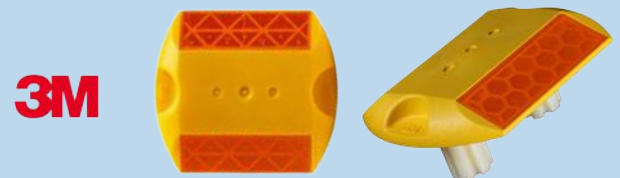
BBH - 280 TMDS

- Dimensions : 100x90x18mm
- Reflection : Prismatic Reflector
- Colour : Yellow / Red / White



3M - 290 SERIES - PLAIN / DUAL SHANK

- Dimensions : 100x100x20mm
- Reflection : PPMA Reflector
- Colour : Yellow / Red / White



SOLAR ROAD STUDS



BBH - SOLAR ALPHA

- Dimensions : 125x125x25mm with Shank
- Blinker : 12A Two way Battery Powered
- Colour : Red



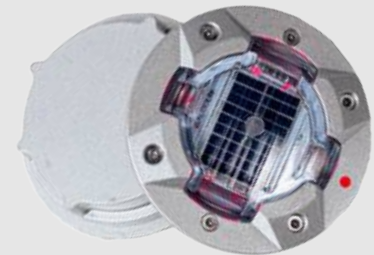
BBH - AL201 TDSM

- Dimensions : 130x130x22mm
- Light Hours : >120h
- Colour : Yellow / Red / White / Blue / Green
- Load : 20 Tonns



BBH - AL360S

- Dimensions : 138x38.5mm
- Light Hours : >120h
- Colour : Yellow / Red / White / Blue / Green
- Direction : 4 sides Emmision



BBH - SOLAR-B

- Dimensions : 125x125x25mm with Shank
- Blinker : Two way Battery Powered
- Colour : Red



SPEED BREAKERS PLASTIC / RUBBER



BBH - ALPHA-R500

- Dimensions : 500X350X50mm
- Material : Rubber
- Colour : Yellow / Black



BBH - ALPHA-R250

- Dimensions : 250X350X50mm
- Material : Rubber
- Colour : Yellow / Black



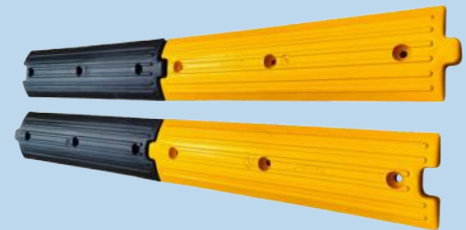
BBH - ALPHA-P

- Dimensions : 250x350x50mm
- Material : ABS Plastic
- Colour : Yellow / Black



BBH - RUMBLE STRIPS

- Dimensions : 500x120x25mm
- Material : ABS Plastic
- Colour : Yellow / Black



DELINETORS & POSTS



BBH - SPRING POST - A

- Dimensions : 750mm height / 200mm base
- Material : Strong Flexible PU
- Colour : Orange
- Reflective Band : 3 Strips, High Intensity Reflective Tape



BBH - REFLECTOR D-POST

- Dimensions : 1200x75mm
- Material : MS
- Colour : Black
- Reflective Band : 3 Strips, Multi-Colour



BBH - D-POST-IRC-79

- Dimensions : 1200x100x25mm
- Material : MS
- Colour : Black/White
- Reflective Band : HIP Grade Reflective Tape



BBH - REFLECTOR POST

- Dimensions : 1750mm Height
- Material : MS
- Colour : Red , White, Yellow Combination
- Reflective Band : Two Way Acrylic Reflector



CONVEX MIRRORS



BBH - Convex 60

- Dimensions : 600mm / 24inch
- Material : Polycarbonate
- Colour : Orange
- Fixing Measure : Bolts & Clamp



BBH - Convex 80

- Dimensions : 800mm / 32inch
- Material : Polycarbonate
- Colour : Orange
- Fixing Measure : Bolts & Clamp



BBH - Convex 100

- Dimensions : 1000mm / 40inch
- Material : Polycarbonate
- Colour : Orange
- Fixing Measure : Bolts & Clamp



BBH - Convex 120

- Dimensions : 1200mm / 48inch
- Material : Polycarbonate
- Colour : Orange
- Fixing Measure : Bolts & Clamp



MEDIAN MARKERS



BBH - Fixed Median Marker - A

- Dimensions : 100x100x150mm
- Material : Impact Resistance Thermoplastic
- Colour : Black & Orange
- Reflection : Two Way Reflective Sheet



BBH - Flexible Median Marker - B

- Dimensions : 180x120x6.5mm (Shank 30mm)
- Material : Impact Resistance Flexible Thermoplastic
- Colour : Black & Orange
- Reflection : 90cm2 Two Way Reflective Sheet



3M - Flexible Median Marker

- Dimensions : 180x120x6.5mm (Shank 30mm)
- Material : Impact Resistance Flexible Thermoplastic
- Colour : Black & Orange
- Reflection : 90cm2 Two Way Reflective Sheet



BBH - Flexible Median Marker AL1500

- Dimensions : 185x125mm
- Material : Impact Resistance Flexible Thermoplastic
- Colour : Black & Orange
- Reflection : Two Way Reflective Sheet

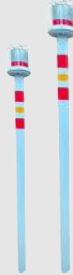


SOLAR PRODUCTS



BBH - Solar Delineter

- Dimensions : 1000x48mm
- Material : MS
- Colour : White Pipe + Red/Orange/Yellow Tape
- Direction : 360 Degree Round



BBH - Solar Sign Board

- Dimensions : 600x900x60mm
- Material : Impact Resistance Flexible Thermoplastic
- Direction : Moving & Blinking
- Battery : Lithium Inbuilt 7.2 AH Battery, 12 Volt



BBH - Solar Warning Light

- Dimensions : 100x180mm (with mesh)
- Material : MS(mesh) / Plastic(Light)
- Direction : 360 degree Blinking



BBH - Solar Warning Light with Clamp

- Dimensions : 80x160mm(without clamp)
- Material : Plastic Body
- Direction : 360 degree Blinking



TRAFFIC CONES



BBH C1.5

- Dimensions : 750mm height
- Material : HDPE
- Colour : Orange
- Weight : 1.5 kgs



BBH C1.25

- Dimensions : 750mm height
- Material : HDPE
- Colour : Orange
- Weight : 1.25 kgs



BBH C3.5

- Dimensions : 750mm height
- Material : HDPE
- Colour : Orange
- Weight : 3.5 kgs



BBH C2.5

- Dimensions : 750mm height
- Material : HDPE
- Colour : Orange
- Weight : 2.5 kgs



OTHER PRODUCTS



POLICE BATON



REFLECTIVE SHEETS & TAPE



SAFETY JACKET



ANTI GLARE SCREEN



EPOXY FOR ROAD STUDS



BREATHALYZER



TRAFFIC LIGHTS



SAFETY BARRICADES



ROAD MARKING PAINT



WALL REFLECTORS



BITUMEN



TRAFFIC SIGNS

& MANY MORE PRODUCTS...

FEATHERLITE AAC BLOCKS



WHAT IS FEATHERLITE BLOCKS?

(PROCESSED UNDER AUTOCLAVED AERATED CONCRETE TECHNOLOGY)

Aerated Autoclaved Concrete is a technology developed in the mid-1920s by the Sweden. Featherlite Fly Ash Blocks consist of around 60% air, this aerated materials processed through autoclaving which entails high pressurised curing of aerated materials formed in cellular shapes, which are known as AAC elements.

These elements can be further classified into blocks, wall/floor/roof panel and lintels. The Featherlite blocks are used as a substitute for the conventional building masonry and have been widely accepted globally because of their benefits such as light weight, thermal and sound insulation, mould resistance and other benefits which ease the process of construction.



RESIDENTIAL HOMES



FACTORY
SHEDS/WAREHOUSE



COMMERCIAL BUILDINGS



BOUNDARY WALLS

TECHNICAL SPECIFICATIONS

Particulars	Units	Values ^g	Requirement as per IS -2185 Part -3
Size (Length x Height)	mm	600 x 250 / 600 x 200*	NA
Size (Width)	mm	75, 100, 125, 150, 200, 225, 250, 300	NA
Size Tolerance (Maximum)	mm	± 1	L: ± 5 mm, H & W : ± 3 mm.
Compressive Strength	N/mm ²	> 4.5+	> 3 (density range 551-650 Gr-1)
Oven Dry Density	Kg/m ³	551-650	551-650
Fire Resistance	Hrs	4 (for 200 mm thick wall)	Min 2 hrs is desirable.
Thermal Conductivity (K Value)	W/mk	0.16-0.21	0.24 Max
Sound Reduction	dB	37-42	NA
Modulus of Elasticity	Mpa	2040	NA
Thermal Resistance (R Value)	m ² .K/W	0.95 (200 mm Width) @ K=0.21W/mK	Max Value is desirable.
Thermal Conductance (U Value)	W/m ² K	1.05 (200 mm Width) @ K= 0.21W/mK	Minimum Value is desirable
Drying Shrinkage (Maximum)	%	0.02	0.1 for Gr-2 & 0.05 for Gr -1
Sound Transmission Class Rating	dB	44	NA
Capillary Water Absorption	gm/dm ²	180	210 @24 Hrs (as per NFP 14306)



ADVANTAGES OF FEATHERLITE AAC BLOCKS



COST SAVING:

- AAC blocks are X9 the size of clay bricks, reducing the need for mortar joints by over 66%.
- Lightweight properties lead to a lighter dead load on the building structure.
- Due to surface accuracy of the blocks, the need for plaster on AAC blocks is less.
- High insulation properties result in saving of energy costs.



ENERGY EFFICIENT:

Thermal insulation is one of the greatest benefits of using AAC blocks, as the AAC block wall helps maintain distinct internal and external temperatures, saving energy costs.



FIRE RESISTANT:

AAC blocks are suitable for use in areas where fire safety is recommended, as these blocks are fire resistant for about 2 to 6 hours depending on the thickness of the wall.



PEST RESISTANT:

The pest resistant properties (as the blocks are made of inorganic materials) of AAC keeps termites away, avoiding damages and losses.



MINIMUM WASTAGE:

Breakage of AAC blocks is negligible, less than 5%, which increases the utilisation of the blocks.



SOUND INSULATION:

Having a commendable STC (Sound Transmission Class), AAC elements are appropriate material for wall construction.



EARTHQUAKE RESISTANT:

The manufacturing process gives the blocks commendable strength, maintaining its light weight property due to which the steadiness of these blocks in buildings is more reliable, making it earthquake resistant.



WATER SAVER:

For the curing process of AAC block walls, there is no need to water the blocks, only the mortar joints need to be cured with water, saving on water consumption.



MINIMUM STORAGE:

Supplies are available in all seasons so that AAC block buyers do not need to maintain large storage areas for AAC blocks.



TIME SAVING:

Time consumed in building walls decreases due to light weight of the product and its size over conventional clay bricks, decreasing lead time as well as installation time.



EASY APPLICATION:

Being light in weight and larger in size, AAC blocks are easy to apply and facilitate ease of work to the mason, especially in highrise projects.



Technical assistance

Our technical representatives provide you with services like sampling of products, doing site audits and are available for technical assistance





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