



## Tomorrow's Mettle Bhoruka Extrusions Pvt Ltd.



Established in 1979

Wholly owned subsidiary of \$7 Billion YKK Group, Japan

Extrusion capacity of 1000 MT / Month (6"/ 8"/ 9" - extrusion press)

In-house Anodizing capacity of 250 MT / Month (Italtechno, Italy)

In-house Powder coating capacity of 350 MT / Month (Nordson, U.S.)

Approved PE-F/D-1036 and PE-SDF/D-2525 Applicator

Award winning SAP implementation (ECC 6.0)

Approved extruder of systems – Alu-K, Airclos, Dorma, EFP, GOS, Reynaers, Schueco, YKK AP

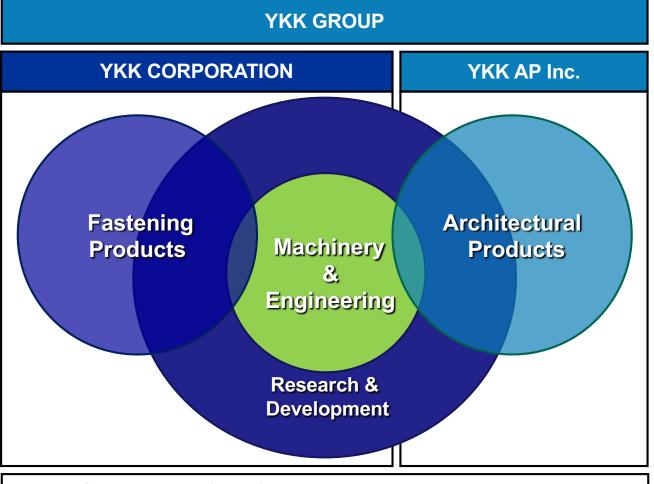
Online self-updating E-catalogue ( www.bhorukaecatalogue.com)

Online order tracking through SAP (Bhoruka 360 portal) and Planning (E-Planner)

Branches: Bangalore, Chennai, Coimbatore, Delhi, Hyderabad, Mumbai, Mysore, Pune

Dedicated teams - enquiries@bhorukaextrusions.com and orderstatus@bhorukaextrusions.com





The YKK Group consists of YKK Corporation, the parent company, which produces fastening products, and YKK AP, which produces architectural products. At the center, we have the Machinery & Engineering Department, which supports research and development.

We build our own machinery to produce zippers, windows, and doors. These three business groups are the basis for global management.

#### YKK CORPORATION

■ Founded : January 1, 1934 ■ Capital : US\$121Million

#### YKK AP Inc.

■ Founded: July 22, 1957 ■ Capital: US\$101Million

■Number of Employees (Group):16,100

[As of Feb 2014]

#### YKK GROUP

■ Description of Business
Fastening Products, Architectural Products
Manufacturing and Sales of Fastening and
Architectural Machinery

■Number of affiliated Companies 71 countries/regions worldwide.

Japan: 21 Overseas: 88
Total: 111 companies
■Number of Employees
Japan: 17,000

Overseas : 22,000

Total (Worldwide): 39,000 (As of Dec 2012)

■Sales (Consolidated Basis) (Fiscal Year 2013)

Fastening: US\$2,862Million Architectural Products: US\$4,018 Others: US\$ 56

Total Sales (Worldwide): US\$6,936Million

(US\$=99.3Yen)



# CYCLE OF GOODNESS I



Typeface: Tenshiyo / Pen name: 「Rituzann」 (It is named after the Tateyama mountain range that I looked up to forever)



Founding president Tadao Yoshida

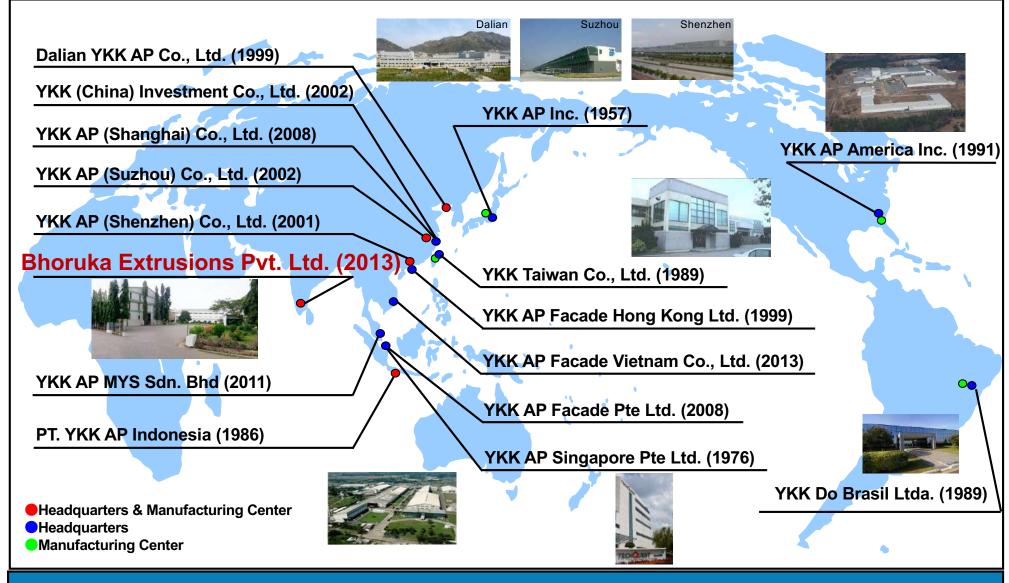
## "No one prospers unless they render benefit to others"

"If we keep creating new values by innovative ideas and inventions through our business activity, we can expand our business. That brings prosperity to our customers and business partners, and as a result, we can make a contribution to society"



## Global Network (Architectural Products)

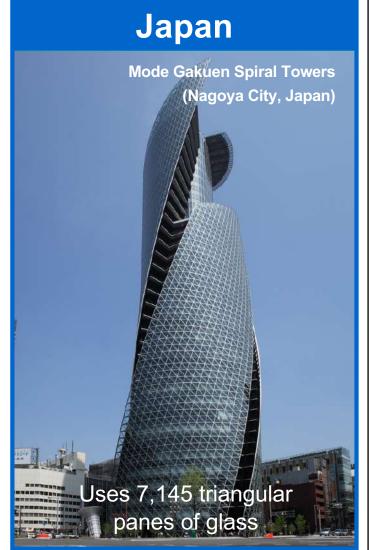




Along with YKK AP Japan, We are doing business in 13 Countries, Taking advantage of our Global Network









Using our design and engineering skills to take on the world's most challenging projects





Managing Director
Mr. Fumihiko Umano



HR Manager Mr. Pradeep Rajshekar



Technical Director Mr. Akira Miyazaki



Quality Control Mr. Veerndra



Sales & Marketing Mr. Rajat Agarwal



Planning In Charge Mr. Dinesh Babu



Factory Manager
Mr. Prasanna Venkatesh



Coating In charge Mr. Prashanth C



Finace Head Mr. Jenil Ramesh Joshi



Design In charge Mr. Rajachar



## Plant & Equipment at BEPL



**Billet Casting** 

Die Manufacturing

Extrusion

Anodising

Powder Coating

Components

TECHNICAL FACT SHEET					
Parameters	Press-1	Press-1 Press-2			
MAKE	Wean United (USA)	Year Chang (Taiwan)	Cheng Hua (Taiwan)		
Strength of extrusion press (TONS)	1800	960	2750		
Diameter of billet	203 mm	152 mm	228mm & 203mm		
Diameter of container	210 mm	158 mm	236mm & 210mm		
Diameter of main Cylinder - Inches	37	25	44.48		
Diameter of small Cylinder - Inches	9 7.087		9.09		
Maximum pressure of Press (BAR)	3000psi 3000psi		3335psi		
Mark of Billets	6063, 6005, 6105, 6061		6063, 6060, 6101, 6005, 6351, 6061,		
(6063-6060)			6082		
Conveyor Length	36Mtrs.	36Mtrs.	50.90 Mts		
Type of Billet Oven (gas, diesel, induction)	Hot log shear	Induction	Hot log shear		
Type of Puller	Track type	Track type	Track type		

TOOL ROOM				
Die types	Solid, Hollow, Semi-hollow			
Diameter CCD	Solid – 254mm; Hollow-230mm			
# of sections	>10,000			
Lead Time	Solid - 15 days; Hollow - 21 days			

l							
	BHORUKA ANODISING						
	Make	taltecno, Italy					
	Microns	Jp to 25					
		Champange, Bronze (Light, Medium, Dark),					
		Black, Pink (Dark, Medium, light) & Burgundy					
	Maximum Length	6600 mm					
	Finish Matt, Polished, Mirron						
	BHORUKA POWDER COATING						
	Pre - Treatment	Italtecno, Italy					
	Powder Coating	Nordson, U.S.					
	Spray System	Automatic					
	Thickness Range	50 To 75 Microns					
	Colors	All RAL Shades					
	Type	Metallic / Non Metallic					
	Gloss	High Glossy, Semi Glossy, Matt					
	Finish	Plain, Texture, Structure					
	Maximum Length	7500 mm					



## Chemical & Mechanical Composition of the Alloy 6xxx Series



Chemical Composition as Per EN 573-3:2007									
Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Aluminium Min
6063	0.20-0.60	0.35	0.1	0.1	0.45-0.90	0.1	0.1	0.1	Reminder
6060	0.30-0.60	0.10-0.30	0.1	0.1	0.35-0.60	0.05	0.15	0.1	Reminder
6005	0.6-0.90	0.35	0.1	0.1	0.40-0.70	0.3	0.2	0.1	Reminder
6082	0.7-1.3	0.5	0.1	0.4-1.0	0.6-1.2	0.25	0.2	0.1	Reminder
6101	0.30-0.7	0.5	0.1	0.03	0.35-0.8	0.03	0.1	0	Reminder
6351	0.7-1.3	0.5	0.1	0.40-0.8	0.40-0.8	0	0.2	0.2	Reminder

Mechanical properties as per DIN 755-2/IS-1285						
Alloy/T6	Tensile Strength, min MPa	Proof Stress min MPa	Elongation A50mm <i>min</i> in %			
6060	190	150	8			
6101	200	170	8			
6063	215	170	6			
6005	250	200	6			
6061	260	240	8			
6351	300	255	8			
6082	310	260	8			

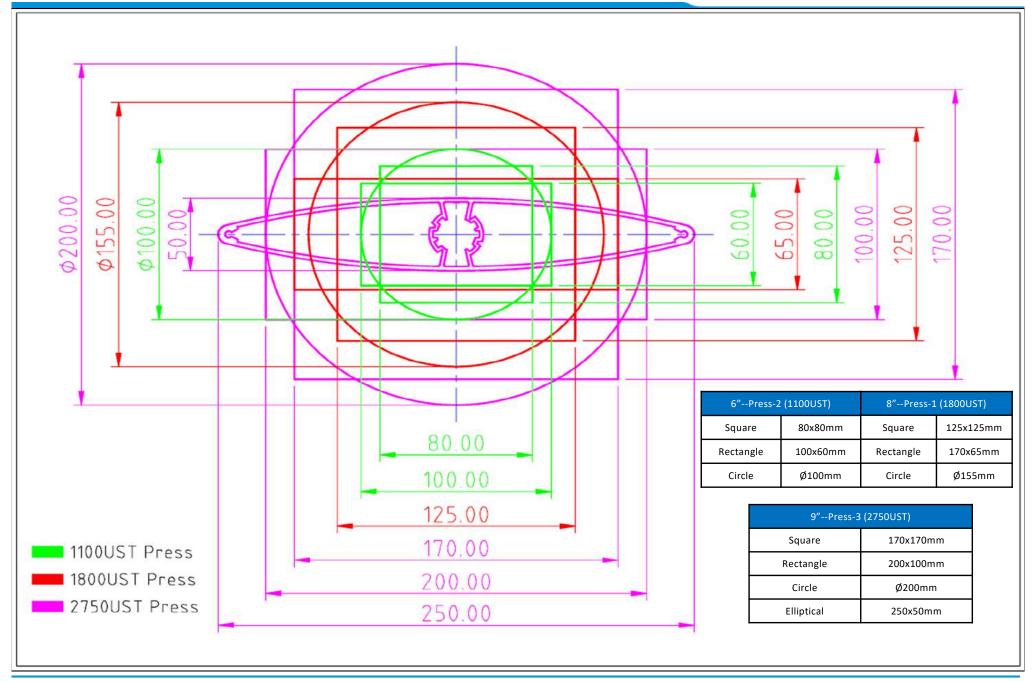
### Different Tempers:

- •T4-Solution heat treated & naturally aged.
- •T5-Cooled from hot working and artificially aged (at elevated temperature).
- •T6-Solution heat-treated & naturally aged.
- •T66- solution heat-treated and then artificially aged - mechanical property level higher than T6 achieved through special control of the process

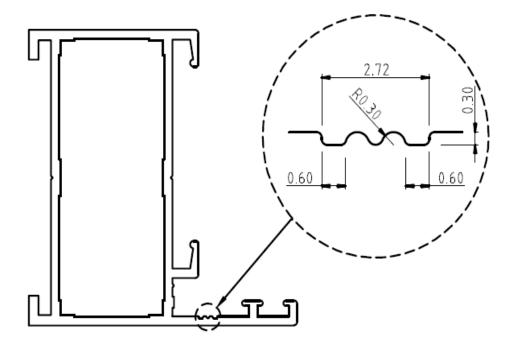


## **Extrusion Range Guidelines**





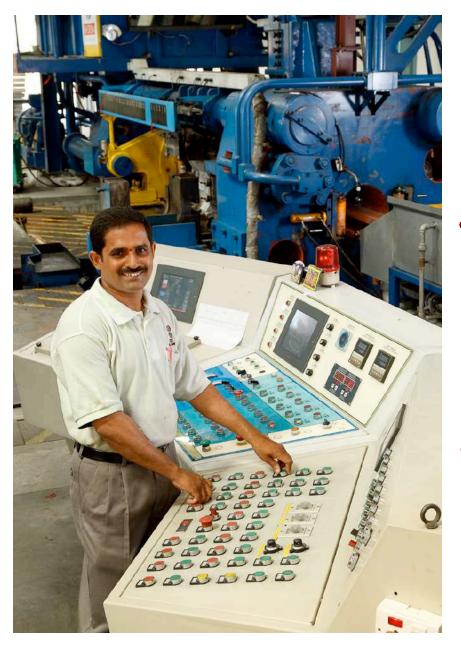




- Bhoruka is having a unique
   Identification mark in all new
   profile developments (since 2015)
- This Identification mark will be prominent throughout the profile length (utilizing only 0.3mm thickness)
- It will be located at only non-functional and unexposed/hidden area of the profile.
- The purpose of this ID mark is for easy identification that a particular profile is Extruded and Supplied by Bhoruka (will be non-functional/ un-exposed area)







**Extrusion** 



**Die Tooling** 



**Powder Coating** 



**Billet Casting** 



**Anodizing** 



**Components** 









Percentage on complaints at all-time low! Well below industry norms

Rework percentage very low

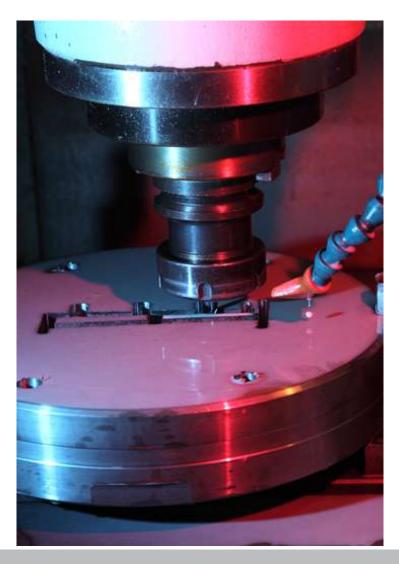
Achieved the lowest rejection rate of 0.66 % last year

No QC teams are needed, every process has QC inbuilt

Ramanaik Asst. Foreman







- Fluid hydrodynamics at 1000 degrees is easy when you have designed over 9000 dies
- R&D is intrinsic to our process
- We design exactly to your need

Die design and extruding is an art. The years of experience allows us to deliver consistent results













66 Bhoruka is a shining example of how SAP should be implemented. We are proud to award them the 2008 ACE award

Nagaraj Bhargava, SAP







- Production planning automated (Eplanner)
- Customer issue resolution in 24 hrs
- Complete traceability of the materials in ERP system
- Order Tracking and CRM is already 100% online via Bhoruka 360

Multi-dimensional operational metrics gives me a 360° view

> Mr. Veerendra -Incharge Customer complaints / Quality



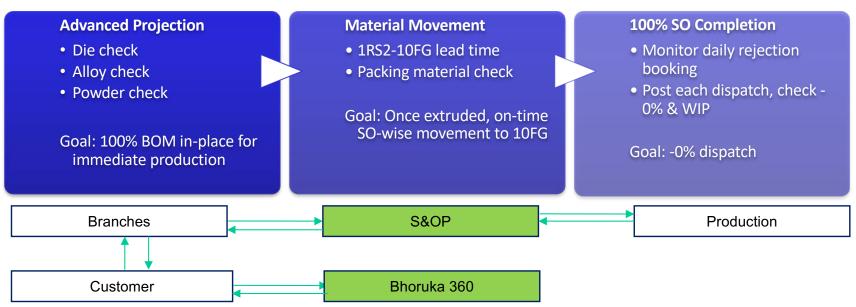




## Leveraging Technology – How to reduce TCO?



Factor	Bhoruka	Competitor	BEPL-Advantage
SO Release	Pieces	Kgs	Matches with FAB Cutting-list software
Weight Measurement	Drawing Mean Weight	Actual Weight	Matches with Tender weight, PO-Invoice consistency, ~3.5% savings on powder weight
Dispatch Tolerance	1-1000 pcs (-0%+5%)/ >1000 pcs (-0%+2%)	+/- 10% in Kgs	Reduced inventory and less total cost
Matching Section	@Aging and Invoice blocked	No check	Reduced inventory at customers
Order Status	Online	NA	Customer can track PO-Invoice online
Est Dt Dispatch	E-Planner (March 2019)	MS Excel	Customers can plan operations based on estimated date of dispatch





## Servicing Industries Related to



### **Building and Construction**

We are one of the **largest direct-sales suppliers** to **the building and construction sector** in India and offer various products ranging from Doors, Windows, Railings, Formwork, Shutters, Curtain Wall systems and more in a wide variety of shapes, sizes and finishes! Our value offerings can be broadly categorised as follows -

### Catalogue

Our catalogue contains more than 9000 sections that Bhoruka has developed by virtue of being in the industry for more than 35 years. It offer a wide variety of readily available designs from various industries and sectors for you to choose from

#### Made-to-order

Drawing from our vast experience, our Design and Engineering department excels at meeting specific customer requests as per the needs and demands of various projects and helps in turning your vision into reality

#### Systems

We have the unique distinction of being the only extruder in India associated with many globally reputed systems such as Airclos, AluK, Dorma, EFP, Schueco to name a few. We will be delighted to offer their range of products through authorised channels

**E-Catalogue**: Online self-updating catalogue with unique set of features (www.bhorukaecatalogue.com)

- ➤ Get instant access to thousands of profiles listed by different categories/sub-categories
- ➤ View product images & description along with other details
- ➤ Download drawings in PDF format right on your desktop
- > Send us an enquiry with complete details directly from the software
- > Search by 'section number'
- ➤ More than 50 designs automatically added every month right on your desktop
- > Choose from our on-line as well as off-line module for on-the-go work



## Servicing Industries Related to



#### **OEM**

Since our inception, Bhoruka has been catering to the growing demand and utilization of aluminum in various sectors ranging from - Electronics, Transportation, Textiles, Renewable Energy, Defense, Aerospace etc. We also specialize in the development of custom-made profiles under our made-to-order offering. We have extensive experience in working with various industrial alloys such as 1060, 6063, 6005, 6082, 6061. Some of the key sectors served by us are -

### Electrical & Electronics

One of the earliest uses of aluminum sections was in the Electrical & Electronics sector. Bhoruka has been supplying aluminium in this sector for over 20 years. Most of our sections are used for applications which require very good conduction, heat control, heat transfer etc. We manufacture a wide variety of sections using different alloys depending on the end-use of our customers

### Transportation

We have got a wide range of sections which are used in the Transportation Sector. Some of our product range includes sections for Bus Body & Truck Body. Bhoruka also manufactures sections for carriers. foot steps & other light SUV requirements

### Textile industry

We supply various sections for for the textile industry, which is an important part of the Indian economy. The quality & precision of these sections are of high importance & Bhoruka is committed in providing both the right quality & service to this sector

### Renewable Energy

Bhoruka has been always committed to a safer and better environment. Keeping this in mind we have dedicated offerings for our solar panel and wind mill customers. These sections are often supplied in natural anodizing which are all done at our own in-house facility.



## Bhoruka Fabcons – Machining Partner



#### **TRANSPORT**

- Metro coaches
- Gangway parts

#### **Automotive**

- Foot Step
- Roof Rails

#### **Textile**

- Roving Tubes
- Bobbin Rail

#### **Projects**

- Radiant Baffle
- Cycle frames



**Machining** – Inhouse machines from Emmegi, and Hurco

<u>Project Management</u> - Developing the entire value chain and taking responsibility upto end delivery

<u>Designing</u> – Working with customer to simply their designs for efficiency and cost reduction

<u>Tools and Fixture Developments</u> – To improve storage and packaging specific to projects

<u>Special Purpose Machine (SPM)</u> - Developed bending , and turning machines inhouse

<u>Sub Assembly</u> – Steel, plastic, wooden and electronic sub assembly

#427E, Hebbal Industrial Area

Mysore - 570016

Karnataka, India

Phone- +91 - 821 - 2510351 / 2513876

E-mail: marketing@bhorukafabcons.com

Web: www.bhourkafabcons.com







### Certifications

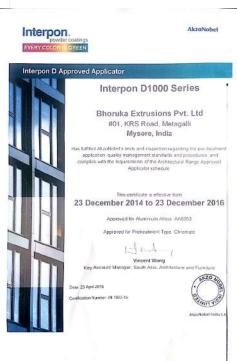


#### ISO 9001-2008



## **Approved applicator for Interpon** series (powder)





### **Interpon D2000**

Interpon D2000 Series

Bhoruka Extrusions Pvt. Ltd

#01, KRS Road, Metagalli

Mysore, India

Applicator schedule.

This certificate is effective from 01 April 2015 to 01 April 2017

Approved for Aluminium Alloys AA5063

Approved for Pretreatment Type. Chromate

Regional Marketing Manager, South Asia

Interpon.

Interpon D Approved Applicator

Date: 8 July 2015

Certification Number IN 2002-15









- Outstanding Export Performance
   Award
- National Safety Award
- International Quality Crown
   Award London
- Engineering Export Promotion
   Council Award
- Best SAP Implementation Award in the metal's Sector



### ISO 9001:2015 Certificate





### **GRIHA** Council Certificate





#### **GRIHA Council**

This is to certify that the product of

#### "Bhoruka Extrusions Pvt. Ltd."

### ALUMINIUM EXTRUDED PROFILES (WITH ANODIZING AND POWDER COATING)

has been included in the GRIHA Product Catalogue under the following categories:

GRIHA V.3 criterion: 17

GRIHA V.2015 criterion: 21

8

#### SVAGRIHA criterion: 12

The product can be used in GRIHA & SVAGRIHA registered projects to meet the GRIHA & SVAGRIHA norms, respectively. This is valid only for the product which has been mentioned above.

The certificate for the above mentioned product is valid from 26<sup>th</sup> February 2020 – 25<sup>th</sup> February 2022

Sanjay Seth Chief Executive Officer

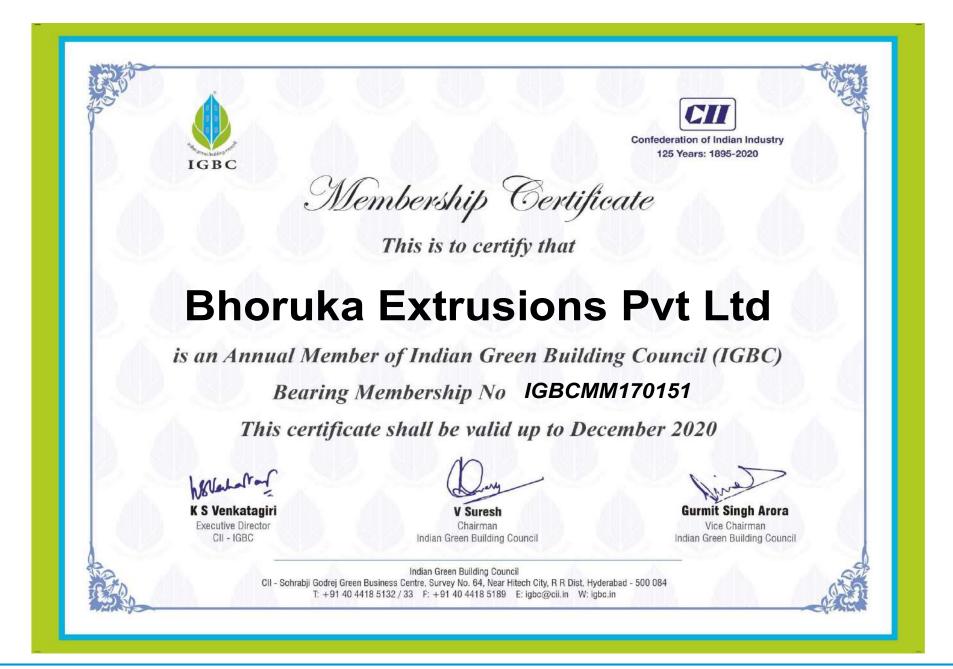
Note: This evaluation has been done based on the documentation - in the form of 3rd party test results and/or declarations - submitted by the manufacturer to GRIHA Council.

GRIHA Council is a joint initiative of Ministry of New and Renewable Energy, Government of India and The Energy and Resources Institute (TERI) to implement GRIHA (Green Rating for Integrated Habitat Assessment), India's National Rating System for Sustainable Habitats.

www.grihaindia.org



















































































































YOUR CONFIDENCE SECURED



































When you think extrusion, think **Bhoruka**, Your partner of choice

# Thank You