INDIA'S No. 1 COMPANY IN ENGINEERED PANEL

INDIAN POWER BRAND

action TESA®

PANELS | FLOORING | DOOR SKINS

BALAJI ACTION BUILDWELL
(ACTION TESA)

The action® Group

The Action Group, one of India's largest business conglomorates came into existence in the early 1970s, under the aegis of Shri Mange Ram Aggarwal - a leader, a visionary, a philanthropist.

The Group began operations by stepping into the footwear industry with Action Shoes which soon became a household name selling. Propelled by the spirit of constant growth and innovation backed by commitment to excellence, the Group is today a multi dimensional company with a strong presence in sectors as diverse as -

- Footwear
- Electronics MICROTEK TECHNOLOGY WE LIVE
- Real Estate
- Chemicals
- Healthcare
- Steel & Power
- Flex Manufacturing
- Coal Mining
- MDF & Particle Boards

action TESA®
PANELS | FLOORING | DOOR SKINS

CERTIFIED CARB ATCM 93120™ SCS GLOBAL SERVICES
CalCompliant

FSC www.fsc.org FSC® C118132
The mark of responsible forestry

Indian Green Building Council MEMBER

TESA MEANS :

TECHNOLOGY
ENVIRONMENTAL FRIENDLY
STRENGTH
FROM ACTION

action TESA®

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about action TESA

44 year old Action group has entered into manufacture of Engineering Panels under the brand name - Action TESA

Action TESA has many milestones to its credit. It has installed the 1st thin MDF plant in the country and TESA is the largest production capacity plant in India for Engineering Panels. The company has also introduced to the country DOME Technology unique to every product. It has also the first company in India to manufacture True HDF Based Laminate Wooden Flooring. Action TESA offers a host of value added products that include MDF & Particle Boards, Door Skin, Embossed HDF, UV Coated Board and Poly High Gloss MDF Board

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About HDHMR Board

HIGH DENSITY HIGH MOISTURE RESISTANCE

Tesa Fibre Boards are being manufactured with Hard Wood so density of our product becomes better than other products available in market. Our Boards are have best routing characteristics due to uniform density gradient & compact core, achieved by using special German Technology for MAT formation & 8 cylinders,18 day light press (1st in India). Action Tesa has state of the art Glue Kitchen capable

HDHMR - High Density High Moisture Resistance. •Hard Wood used for higher density of product •Special Glue being used to make it Water Resistant Product as per Indian climate• Water Resistance Characteristics as per ISI Standard •Ideal Routable Substrate with Sharp Cut & Routed Edge•Ready & Smooth Surface which absorbs less paint in painting process thus saves paint cost also •Easy Workibility •Cost Effective Paneling Solution

The key application areas of HDHMR :•Kitchen Shutters •Furniture where risk of moisture exist •Door Shutters •Packing Industry •Shoe Heel•Partitions •Outdoor Fixtures like election cutouts or similar applications.

Product Specification

Thicknesses: 8mm, 12mm 16mm & 18mm	**Panel Size :** 8ft x 4 ft

Available in Plain and Prelam (White, Frosty White, Silver Grey and Balancing which we will give in OSR and BSB)

HDHMR Board Application

HDHMR

HDHMR Board Application

HDHMR

action TESA®
PANELS | FLOORING | DOOR SKINS

Definitely Strong

HDHMR

HIGH DENSITY HIGH MOISTURE RESISTANCE

HDHMR IS BETTER THAN PLYWOOD

COST EFFECTIVE

DURABLE

BORER RESISTANCE

Termite Resistant

action TESA®
PANELS | FLOORING | DOOR SKINS

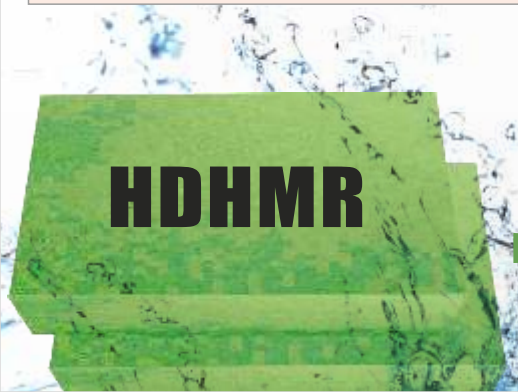
PLYWOOD	HDHMR
DENSITY around 750 Kg/m3	DENSITY More then 850 Kg/m3 resulting in better compactness and strength

Definitely Strong

HDHMR

HIGH DENSITY HIGH MOISTURE RESISTANCE

PLYWOOD	HDHMR
Plywood is made with wood veneers which are laid in such a manner that grains of adjacent layers are in perpendicular direction to each other.	HDHMR is made with wood fibre/wood chips and synthetic thermosetting resin in a homogeneously spread MAT & pressed in temperature and pressure controlled press.
Plywood uses veneers pealed from the trunk of mature hard wood trees only. Hence over 50% of the tree remains unused or wasted	HDHMR is made from wood fibres/chips that is produced from plantation wood, agricultural waste or from the forest wood waste & uses 95% of the tree. Hence saves the environment
Since made from veneers, disadvantages of wood like Termite/Borer attack and uncontrolled expansion/contraction remains there.	Made from fibres of lignocellulosic materials, during process of making fibres the wood chips are steam cooked resulting in removal of all food content thereby making it Termite/Borer resistant, as these insects attack the wood in search of food only.
True thickness is not available as core & face thickness vary with the peeling & the can be controlled only to a certain extent	True thickness is available as pressing parameters are perfect. Precise uniforms thickness can be manufactured.
Over the passage of time, plywood layers tends to peel off from the edges	HDHMR has a multi-dimensional bond between fibre which is stronger with higher active bonding surface between fibres.
Plywood & Block Board tend to have density variation due the variable grain density, hence has varied physical & mechanical properties. Has core gaps.	HDHMR homogeneously constructed with uniform spread of fibre/chips, hence has uniform physical & mechanical properties.
Plywood has a surface that needs to be finished/prepared like sanding and putty filling before painting/ polishing or other finishing processes .	In HDHMR/MDF there's paint/polish ready surface. Pasting of veneer/HPL is easier resulting smooth finish without any undulation unlike plywood or block board
Due to uncontrolled thickness variation across the board and rough surface, pre-lamination of resin impregnated paper is not possible	Due to uniform thickness and smooth surface, pre-lamination on HDHMR with resin impregnated paper gives a perfect finish
Plywood cannot be carved or routed or profiled	HDHMR due to its fibrous homogeneous construction can be profiled, carved, moulded, routed
Density lies in normal medium density i.e around 750 Kg/m3	Density more then 850 Kg/m^3 resulting in better compactness and strength
On absorption of moisture pealing of layers takes place	High moisture resistence, single layer no layer separation
Costly product, price of BWR plywood of branded companies very high	Cost effective, avilable at almost half the cost of BWR plywood



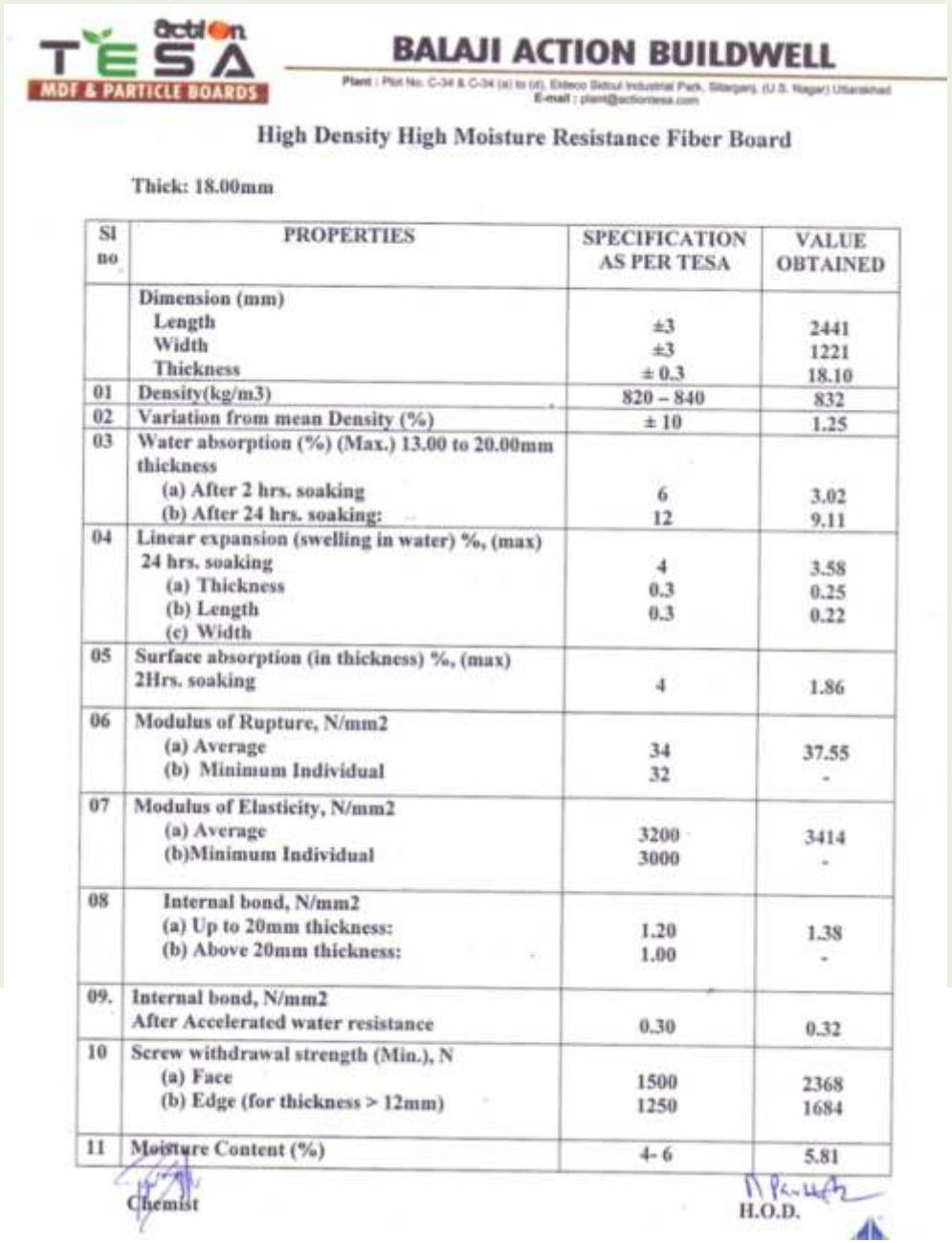
Definitely Strong

HDHMR

HIGH DENSITY HIGH MOISTURE RESISTANCE

BORER RESISTANCE

Termite Resistant



BALAJI ACTION BUILDWELL

Plant : Plot No. C-34 & C-34 (a) to (d), Eldeco Sidcul Industrial Park, Sitarganj, (U.S. Nagar) Uttarakhand
E-mail : plant@actiontesa.com

High Density High Moisture Resistance Fiber Board

Thick: 18.00mm

Sl no	PROPERTIES	SPECIFICATION AS PER TESA	VALUE OBTAINED
	Dimension (mm) Length Width Thickness	 ±3 ±3 ± 0.3	 2441 1221 18.10
01	Density(kg/m3)	820 – 840	832
02	Variation from mean Density (%)	± 10	1.25
03	Water absorption (%) (Max.) 13.00 to 20.00mm thickness (a) After 2 hrs. soaking (b) After 24 hrs. soaking:	 6 12	 3.02 9.11
04	Linear expansion (swelling in water) %, (max) 24 hrs. soaking (a) Thickness (b) Length (c) Width	 4 0.3 0.3	 3.58 0.25 0.22
05	Surface absorption (in thickness) %, (max) 2Hrs. soaking	4	1.86
06	Modulus of Rupture, N/mm2 (a) Average (b) Minimum Individual	 34 32	 37.55 -
07	Modulus of Elasticity, N/mm2 (a) Average (b)Minimum Individual	 3200 3000	 3414 -
08	Internal bond, N/mm2 (a) Up to 20mm thickness: (b) Above 20mm thickness:	 1.20 1.00	 1.38 -
09.	Internal bond, N/mm2 After Accelerated water resistance	0.30	0.32
10	Screw withdrawal strength (Min.), N (a) Face (b) Edge (for thickness > 12mm)	 1500 1250	 2368 1684
11	Moisture Content (%)	4- 6	5.81

Chemist

H.O.D.

HDHMR Board Properties -18mm

(Internal Test Report)

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PANELS | FLOORING | DOOR SKINS

BORER RESISTANCE

Termite Resistant

Definitely Strong

HDHMR

HIGH DENSITY HIGH MOISTURE RESISTANCE

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PANELS | FLOORING | DOOR SKINS

Higher Screw Holding Strength

HDHMR Screw holding strength (kg)	
Plywood (BWR) grade	>275
TESA HDHMR Board	>350

10 HEAD SANDING

TRUTH Calibrated Panel

POLISH READY SURFACE

Split resistant core

air FLOW

Definitely Strong
HDHMR
HIGH DENSITY HIGH MOISTURE RESISTANCE

BORER RESISTANCE

Termite Resistant

action TESA®
PANELS | FLOORING | DOOR SKINS

Sales Network

Pan-India Presence

Dedicated Sales & Support Team

Strong network of Distributors & Dealers

Definitely Strong

HDHMR

HIGH DENSITY HIGH MOISTURE RESISTANCE

Prestigious Customer

SAMSUNG

TATA MOTORS

Godrej | PROPERTIES

Parsvnath Developers Ltd.
Committed to build a better world
AN ISO 9001, 14001 & OHSAS 18001 CERTIFIED COMPANY

TATA HOUSING

OMAXE
Turning dreams into reality

EVOK MEGA HOME STORE

AMRAPALI GROUP

adidas

ansal API
Building lifestyles since 1967

TAJ GROUP THE GATEWAY HOTELS & RESORTS

AKSHAR
INSPIRE LIFE
Mumbai | Pune | Ahmedabad

GLOBUS MARITIME LTD

Simplex Infrastructures Limited

MAHIMA GROUP
COMMITTED TO EXCELLENCE

GOLDFINCH
The Finest Boutique Hotel

action TESA®
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THANK YOU