


1st in India

 **Novanext**
Embracing the **Future**

Durable by Design

 Duro-Sheet™ for PV Modules

Backsheet Catalogue by Novanext™

Know Us

“The *New Next* of Indian Solar Industry”

Novanext Energies Pvt Ltd is one of the most promising companies emerging in the Renewable Energy Sector, being promoted by a group of well accomplished entrepreneurs who have proven success records in each of their respective fields with a combined experience in excess of 75 years between them.

The climatic change happening all around, warrants for the whole world to take visible actions to reduce carbon emissions and move towards a sustainable greener energy. The Indian Government also recognises this and has been giving a tremendous push to achieve a target of 300 GW (gigawatt) by 2030. To contribute to this larger environmental saving goal, Novanext energies is making a humble beginning by installing a state-of-the-art PV Solar Backsheet

Manufacturing plant with **widest width of 1600mm** and a vision to go up the value chain, making a bigger impact going forward.

As our name suggest – “**Novanext = New + Next**”, we at Novanext are always curious and excited about what will be the Next new thing. We believe in embracing the change by bringing in new technologies and always being future ready. **“Innovation” is at the core of Novanext Energies.**

In sync with above ideology, **1st time in India**, Novanext is bringing in the latest **technology of fluoro coating** on backsheet. Further **we are future ready**, as our equipment can cater the demand of future PV Solar modules needing backsheets as wide as 1600mm.

Core Purpose & Values of Novanext™

To enhance global climate sustainability and making mother earth a liveable place for future generations by contribution towards efficient green energy solutions.

Innovation

Focus on Quality

Continuous Improvement

Integrity

Win-Win

Respect to All

Goal 2027 of Novanext™

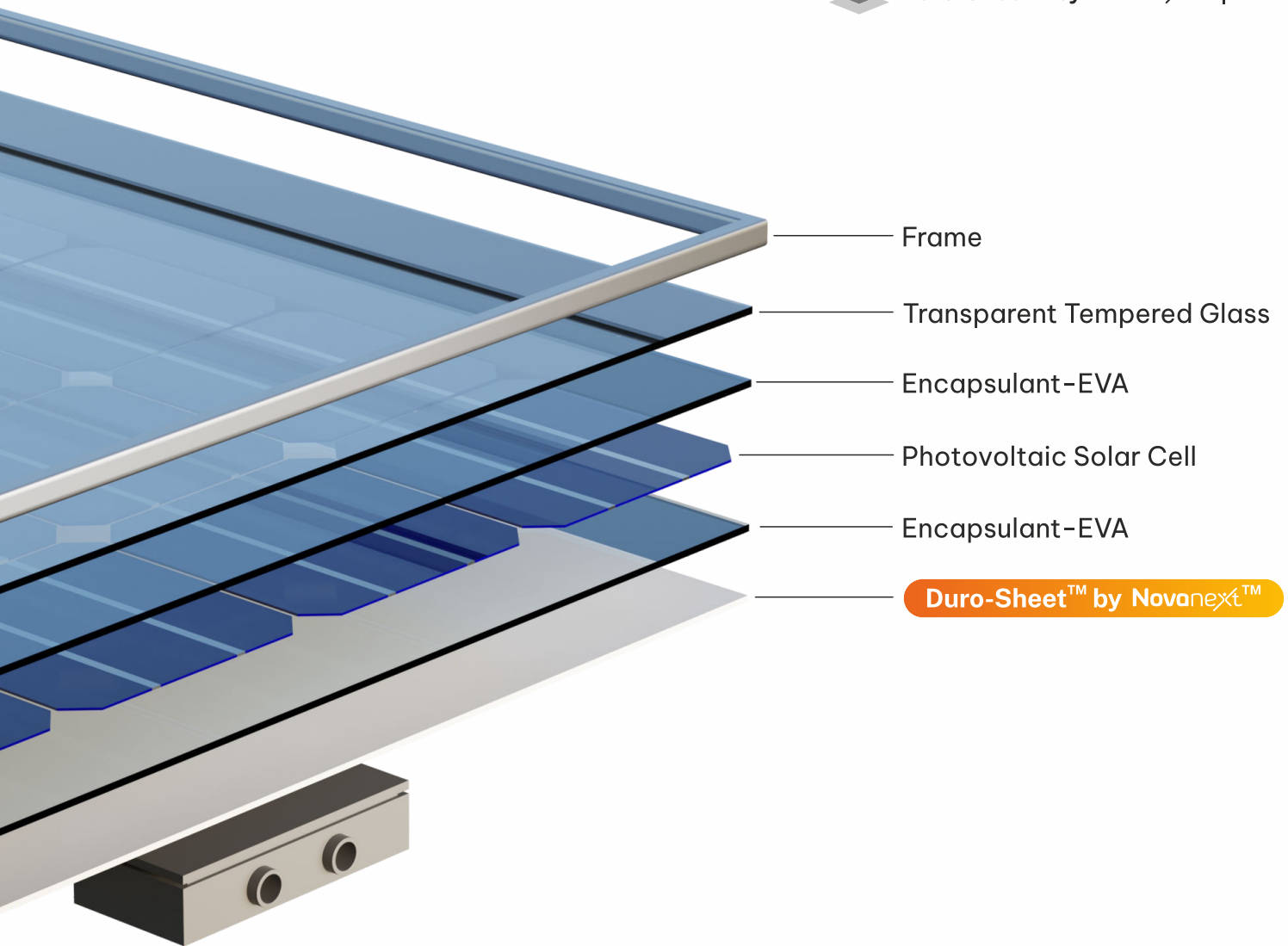
To become one of the topmost material supplying company of India in the field of Solar Energy.

Quality Policy of Novanext™

We at Novanext Energies are driven by the Passion of maintaining high Quality standards in all the aspects, and not just the product !!

- **First and foremost will always be ensuring zero defect product !!**
It is done by taking all the required steps starting from raw-material testing, to process control measures and checks at each interval and eventual final product testing. All of the above is done in an in-house well equipped Laboratory following standardized systems.
- **High Manufacturing Standards**
We aim not only to maintain High Manufacturing standards, but also continually improve it.
- **Nurture people - continuous education, training and motivation** of Team Novanext by giving them not just professional skills but also very important life skills which will help them nurturing their personal life and relationship.

“We benchmark ourselves with the best and we want to deliver only the best.”



Importance of Backsheet

Solar modules have to go through harsh environmental conditions like extreme heat & sunlight, and also excessive rain and humidity. They are expected to withstand such environmental stresses for 25 years without excessive degradation (<20%) in power for them to qualify for most applications.

Backsheet plays a key role in protecting the solar panel and giving it the required longevity.

Backsheet is a critical component in the construction of a PV Solar module. It is the outermost layer of the module which is designed to protect the inner components of the module. It not only acts like a shield against external stresses but also performs the important function of electric insulation. The major purpose of backsheet is to protect PV module from UV radiations, moisture penetration, electrical insulation of the system, and to offer durability to the PV module. The mechanical, electrical, optical and chemical properties and durability of backsheets are critical to the long-term reliability, durability and safety of the PV Solar modules.

Duro-Sheet™ Advantage

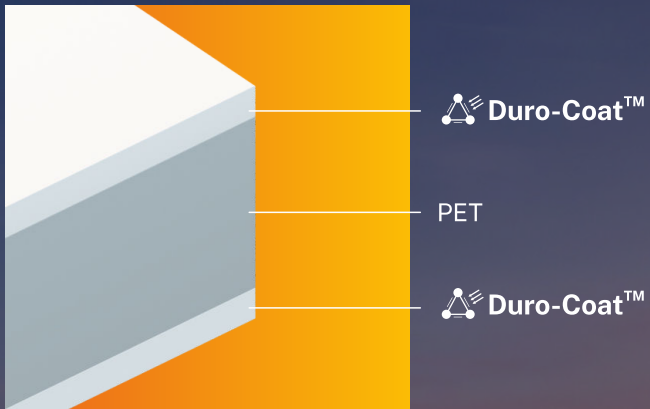
Considering the above importance of backsheets, **Duro-Sheet™** from **Novanext™** Energies Pvt Ltd has been meticulously engineered using a unique **patented*** technology and an optimal chemical composition **Duro-Coat™** invented after years of R&D and practical manufacturing experience of our technology partner.

USP of Duro-Sheet™ from Novanext™

- **1st in India for coating Technology :**
Novanext is the only company in India which can manufacture the backsheets with Fluoro coating technology.
- **Maximum Width 1600mm :**
The latest and future ready plant and machinery of Novanext gives Duro-sheet the recognition to be India's widest Backsheet range upto 1600mm
- **Biggest backsheet production capacity:**
Novanext is installing India's biggest backsheet production capacity of up to 6GW
- **Wide Application :**
Duro-sheet range of Backsheets can be used in various places like solutions for rooftop utility, commercial and BIPV modules and all types of crystalline as well as thin PV modules, also modules with 1000v and 1500v system voltage. It is equally compatible with Mono, Bifacial and PERC technology solar modules.
- **Quicker Delivery :**
Specially for the Fluoro coating type of Backsheet, which is currently imported, Novanext can provide that range in Duro-sheet in 1/4th of the normal wait time !!

DPD-275-A, DPD-310-A

Product Structure Diagram:



Novanext™
Duro-Sheet™ Films
Total Thickness:
275µm & 310µm

Product Features:



High inner layer reflectivity



Black Backsheet with high heat dissipation



High Transparency in Clear Backsheet



Resistance to aging due to moisture & heat



Results in reduction of PID

Storage:

Storage Methods:

Storage to avoid direct sunlight, moisture in and keep packing condition;

Storage Period:

Room temperature in ambient humidity, (23±10°C, 55±15%RH) 12 Months/12

Packaging:

- 200m x 11 Rolls
- 400m x 4 Rolls
- 600m x 4 Rolls

Product Specifications:

Item		Unit	Value	Standard
Product thickness		um	275±5% / 310±5%	GB/T 13541-92
Tensile strength (MD/TD)		MPa	MD≥100、TD≥100	ISO 527.3
Elongation of break (MD/TD)		%	MD≥100、TD≥100	ISO 527.3
Heat shrinkage (MD/TD) 150Θ*30min		%	MD≤1、TD≤0.5	IEC 62788-1-5
Peel strength		N/cm	≥5	ISO 8510-2:2006
BS/EVA peel strength		N/cm	≥70	ISO 8510-2:2006
Inner layer reflectivity		%	≥80	ISO 9050:2003
Sand drop resistance		L	≥110	ASTM D968
Water Vapour transmission 38Θ 90%RH (IR)		g.m2 /day	≤1.8	ISO15106-3
SI cohesiveness		—	Well	15Kg/3min
Breakdown Voltage		KV	≥20	IEC 62788-2:2017
Partial discharge		VDC	≥1000 / ≥1500	IEC 62788-2:2017
DH Test (1000H)	Yellow Index	—	≤2	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
UV Test (2000H)	Yellow Index	—	≤2	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
Thermocycling Test (200 times)	Yellow Index	—	≤2	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
Humidity-freeze Test (10 times)	Yellow Index	—	≤2	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017

Available Colors:

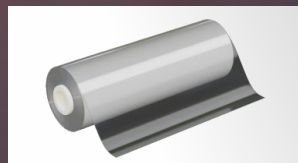
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Black

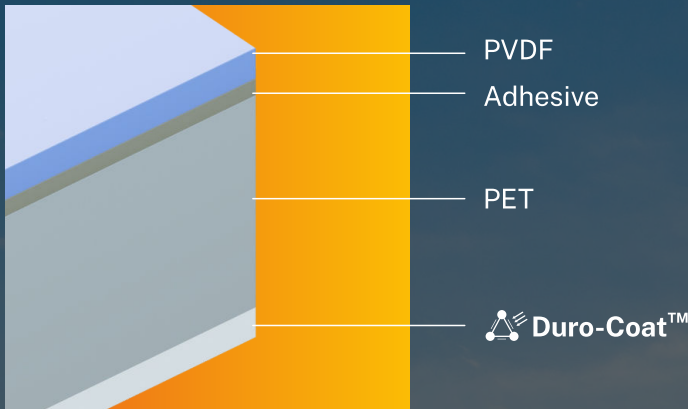


Transparent



KPD-315-A

Product Structure Diagram:



Novanext™
Duro-Sheet™ Films
Total Thickness:
310µm

Product Features:



High weather resistance



Excellent UV performance



Suited for Tropical Regions for with high sun light



Extra Strong Adhesion to Encapsulant



High sand scratch and corrosion resistance

Storage:

Storage Methods:

Storage to avoid direct sunlight, moisture in and keep packing condition;

Storage Period:

Room temperature in ambient humidity, (23±10°C, 55±15%RH) 12 Months/12

Packaging:

- 200m x 11 Rolls
- 400m x 4 Rolls
- 600m x 4 Rolls

Product Specifications:

Item		Unit	Value	Standard
Product thickness		um	315±5%	GB/T 13541-92
Tensile strength (MD/TD)		MPa	MD≥100、TD≥100	ISO 527.3
Elongation of break (MD/TD)		%	MD≥100、TD≥100	ISO 527.3
Heat shrinkage (MD/TD) 150Θ*30min		%	MD≤1、TD≤0.5	IEC 62788-1-5
Peel strength		N/cm	≥5	ISO 8510-2:2006
BS/EVA peel strength		N/cm	≥70	ISO 8510-2:2006
Inner layer reflectivity		%	≥90	ISO 9050:2003
Sand drop resistance		L	≥110	ASTM D968
Water Vapour transmission 38Θ 90%RH (IR)		g.m2 /day	≤1.8	ISO15106-3
SI cohesiveness		—	Well	15Kg/3min
Breakdown Voltage		KV	≥20	IEC 62788-2:2017
Partial discharge		VDC	≥1500	IEC 62788-2:2017
DH Test (1000H)	Yellow Index	—	≤2	IEC 62788-2:2017
	PVDF/PET peel strength/PVDF/PET	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
UV Test (2000H)	Yellow Index	—	≤2	IEC 62788-2:2017
	PVDF/PET peel strength/PVDF/PET	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
Thermocycling Test (200 times)	Yellow Index	—	≤2	IEC 62788-2:2017
	PVDF/PET peel strength/PVDF/PET	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
Humidity-freeze Test (10 times)	Yellow Index	—	≤2	IEC 62788-2:2017
	PVDF/PET peel strength/PVDF/PET	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017

Available Colors:

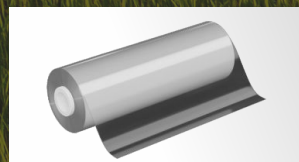
White



Black

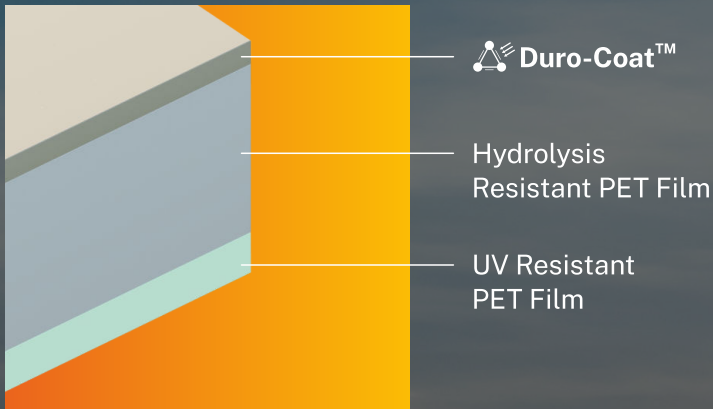


Transparent



PD-310-A

Product Structure Diagram:



Novanext™
Duro-Sheet™ Films
Total Thickness:
310µm

Product Features:



Very strong Hydrolysis & UV Resistance



Exceptional water vapour barrier property



Outstanding Electrical Insulation & Performance



High Sand Scratch & Corrosion Resistance



High Inner layer reflectivity

Storage:

Storage Methods:

Storage to avoid direct sunlight, moisture in and keep packing condition;

Storage Period:

Room temperature in ambient humidity, (23±10°C, 55±15%RH) 12 Months/12

Packaging:

- 200m x 11 Rolls
- 400m x 4 Rolls
- 600m x 4 Rolls

Product Specifications:

Item		Unit	Value	Standard
Product thickness		um	310±5%	GB/T 13541-92
Tensile strength (MD/TD)		MPa	MD≥100、TD≥100	ISO 527.3
Elongation of break (MD/TD)		%	MD≥100、TD≥100	ISO 527.3
Heat shrinkage (MD/TD) 150Θ*30min		%	MD≤0.8、TD≤0.2	IEC 62788-1-5
Peel strength		N/cm	≥4	ISO 8510-2:2006
BS/EVA peel strength		N/cm	≥70	ISO 8510-2:2006
Inner layer reflectivity		%	≥80	ISO 9050:2003
Sand drop resistance		L	≥110	ASTM D968
Water Vapour transmission 38Θ 90%RH (IR)		g.m2 /day	≤1.6	ISO15106-3
SI cohesiveness		—	Well	15Kg/3min
Breakdown Voltage		KV	≥21	IEC 62788-2:2017
Partial discharge		VDC	≥1500	IEC 62788-2:2017
DH Test (1000H)	Yellow Index	—	≤2	IEC 62788-2:2017
	High Grade PET/PET peel strength	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
UV Test (2000H)	Yellow Index	—	≤2	IEC 62788-2:2017
	High Grade PET/PET peel strength	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
Thermocycling Test (200 times)	Yellow Index	—	≤2	IEC 62788-2:2017
	High Grade PET/PET peel strength	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017
Humidity-freeze Test (10 times)	Yellow Index	—	≤2	IEC 62788-2:2017
	High Grade PET/PET peel strength	N/cm	≥3.5	IEC 62788-2:2017
	Elongation of break	%	≥50	IEC 62788-2:2017

Available Colors:

White





Working towards a better future.



Novanexxt Energies Pvt Ltd

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Village Rampar, Taluka & District Jamnagar
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