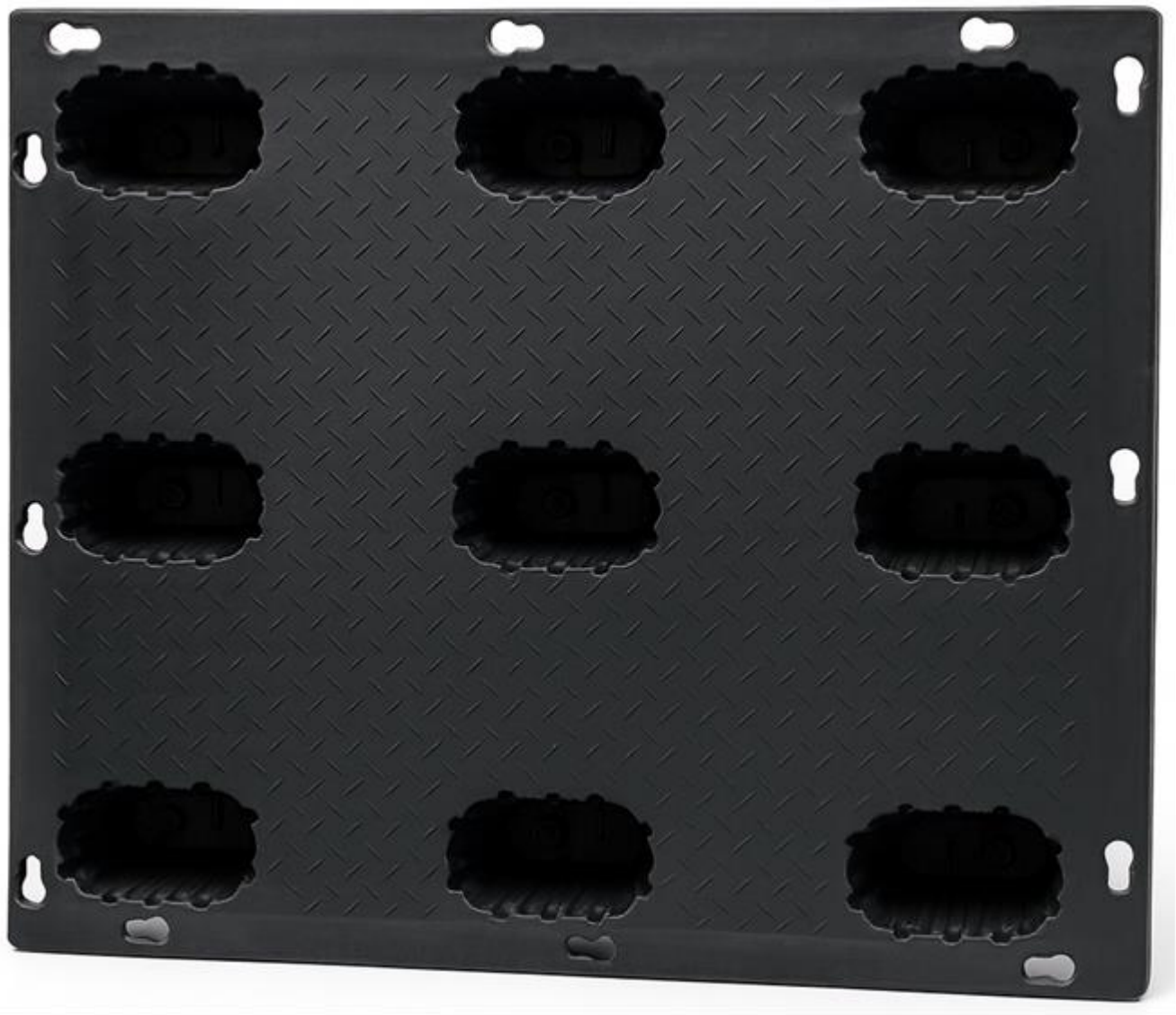
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TECHNICAL DATA SHEET (TDS)

Model: NP-BLOW-100×120

Blow-Molded Plastic Pallet – 100 × 120 × 14 cm



1. Product Overview

The NP-BLOW-100×120 is a heavy-duty industrial pallet manufactured using high-strength HDPE through blow-molding technology.
Engineered for durability, impact resistance, and long service life in warehousing, food processing, export logistics, and manufacturing applications.

2. General Specifications

- **Model:** NP-BLOW-100×120
- **External Dimensions:**
  - Length: 120 cm
  - Width: 100 cm
  - Height: 14 cm
- **Material:** High-Density Polyethylene (HDPE)
- **Manufacturing Process:** Blow Molding
- **Feet Design:** 9 Feet (Nine-Leg Pallet)
- **Deck Type:** Perforated (Ventilated)
- **Color Options:** Black / Blue / Green (Customizable)
- **Logo:** Embossed logo available on request

3. Weight

- **Net Weight: 10.5 kg ± 5%**
  (Weight varies slightly based on wall thickness and material composition.)

4. Load Capacity

Load Type	Capacity
Static Load	4000 – 5000 kg
Dynamic Load	1500 – 1800 kg
Racking Load	**Not Rackable**

Suitable for floor stacking, transport, and conveyor systems — not intended for warehouse racking.

5. Structural Features

- 9-feet base for stable floor stacking
- Perforated deck for reduced weight and better airflow
- 4-way forklift entry
- Reinforced rounded corners
- Impact-resistant HDPE formulation
- High durability under repeated loading cycles

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6. Material Properties

- Excellent resistance to:
  - Acids
  - Oils
  - Detergents
  - Moisture absorption
- **Temperature Range:** −20°C to +60°C
- UV stabilizers available upon request
- **Recyclability:** 100% recyclable material

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7. Advantages

- Superior impact resistance (proven by strength tests)
- Lightweight vs. load capacity ratio
- Hygienic and easy to wash
- Does not splinter, rust, or warp
- Ideal for food factories and cold storage
- Long operational lifespan

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8. Applications

- Food & Beverage industry
- Cold chain logistics
- Export shipments
- Fresh produce packing
- Manufacturing plants
- Pharmaceutical distribution
- Warehousing and general logistics

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STRENGTH TEST REPORT

Model: NP-BLOW-100×120

1. Test Summary

A series of mechanical impact and drop tests were performed to evaluate the structural strength and durability of the blow-molded pallet NP-BLOW-100×120.

All tests were conducted on standard concrete warehouse flooring.

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2. Impact (Hammer) Test

Test Method

- Tool: Solid steel hammer
- Hammer weight: **3 kg**
- Impact points:
  - Center of deck
  - Corner
  - Foot area
- Number of strikes: 3–5 impacts per location
- Drop height: 170–200 cm

Result

- **No cracks**
- **No fractures**
- **No structural deformation**
- **Only minor cosmetic marks**

Conclusion:

The pallet demonstrated exceptional resistance to heavy impact and maintained full structural integrity.

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3. Drop Test

Test Procedure

- Height: 280–300 cm
- Drop positions:
    1. Flat deck drop
    2. Edge drop
    3. Corner drop
- Surface: Industrial concrete floor

Result

- No cracks
- No corner failures
- No breakage under dead-weight drop
- Feet maintained original shape

Conclusion: The pallet passes industrial drop-test standards for blow-molded HDPE pallets.

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4. Flexural Stress Test (Manual Simulation)

- Applied force: Heavy manual bending at center + foot area
- Observation: No flexural cracking or whitening
- Deformation: Temporary flex only, returned to original form

Conclusion: Material exhibits excellent elasticity and memory retention under flex-load.

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5. Overall Strength Rating

Category	Rating
Impact Resistance	★★★★★
Drop Resistance	★★★★★
Flexural Strength	★★★★☆
Durability	★★★★★
Rackability	N/A

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6. Final Statement

The NP-BLOW-100×120 blow-molded pallet is validated as a heavy-duty, industrial-grade pallet suitable for demanding logistics applications and harsh environments.

It exceeds the durability and impact-performance levels of typical HDPE pallets in the market.