MS CHEQUERED PLATE WEIGHT CHART 2026

Complete Guide to Weight Per Square Meter, Formula, Sizes, Specifications & Applications

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MS Chequered Plate Weight – Complete Reference Guide

Mild Steel (MS) Chequered Plates are widely used for industrial flooring, platforms, staircases, walkways, ramps, machine areas, trailers, and various fabrication applications. Their raised surface pattern provides a textured finish and can improve surface grip in suitable applications.

Knowing the approximate weight of a steel plate is important for **material estimation, transportation planning, structural calculations, project costing, inventory management, and purchasing**.

This 2026 reference guide provides thickness-wise approximate values along with calculation methods and practical examples to help users estimate the weight of MS chequered plates.

What This PDF Covers

- MS Chequered Plate Weight Chart 2026
- Approximate weight per square meter
- Theoretical flat plate calculation
- Chequered plate reference weight
- Weight calculation formula
- Worked calculation examples
- 4 × 8 feet plate weight
- Common thicknesses and sizes
- Common grades and specifications
- Chequered plate patterns
- Industrial applications
- Weight conversion information
- Factors affecting actual weight
- Purchasing information
- Frequently Asked Questions

Important Weight Disclaimer

The values presented in this PDF are **approximate reference values for estimation purposes**.

The actual supplied weight of a chequered plate can vary depending on nominal thickness, plate dimensions, raised pattern geometry, manufacturing tolerances, material density, applicable standards, and manufacturer practices.

For commercial purchasing, structural calculations, transportation planning, or billing, always confirm the actual product specifications and supplied weight with the manufacturer or supplier.

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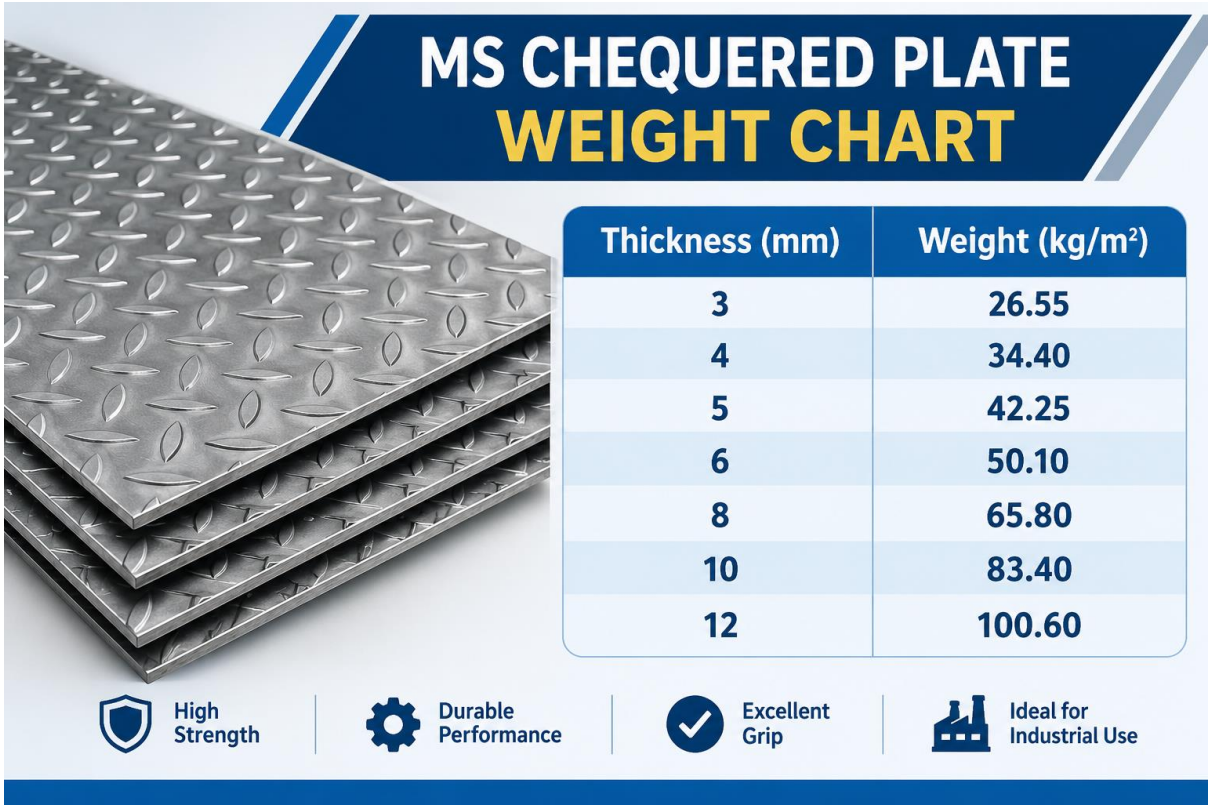
MS CHEQUERED PLATE WEIGHT CHART 2026



The following table provides approximate reference weights for commonly used mild steel chequered plate thicknesses.

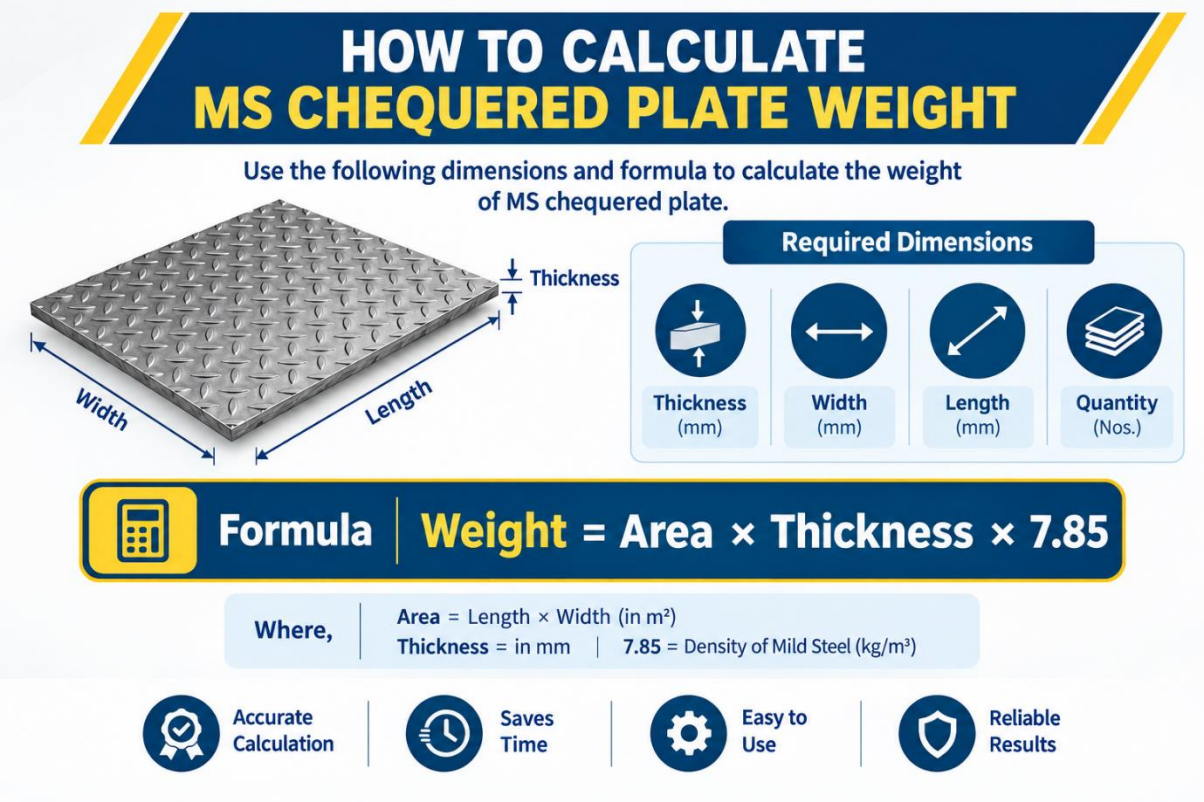
Thickness	Approx. Reference Weight
3 mm	26.55 kg/m²
4 mm	34.40 kg/m²
5 mm	42.25 kg/m²
6 mm	50.10 kg/m²
8 mm	65.80 kg/m²
10 mm	83.40 kg/m²
12 mm	100.60 kg/m²

Reference Weight Note

These values are provided for estimation and quick reference. They should not be interpreted as a universal guaranteed finished weight for every manufacturer or pattern.

THEORETICAL FLAT PLATE WEIGHT

For a theoretical flat mild steel plate, a commonly used steel density reference is approximately **7.85 g/cm³**, equivalent to approximately **7850 kg/m³**.



Formula

Weight (kg) = Length (m) × Width (m) × Thickness (mm) × 7.85

Example

For a flat MS plate:

Length = 2.5 m
Width = 1.25 m
Thickness = 6 mm

Calculation:

2.5 × 1.25 × 6 × 7.85

= **147.19 kg**

This represents the theoretical weight of a flat 6 mm mild steel plate measuring 2500 × 1250 mm.

A chequered plate can have a higher finished mass because of its raised surface pattern.

WHY CHEQUERED PLATES CAN WEIGH MORE

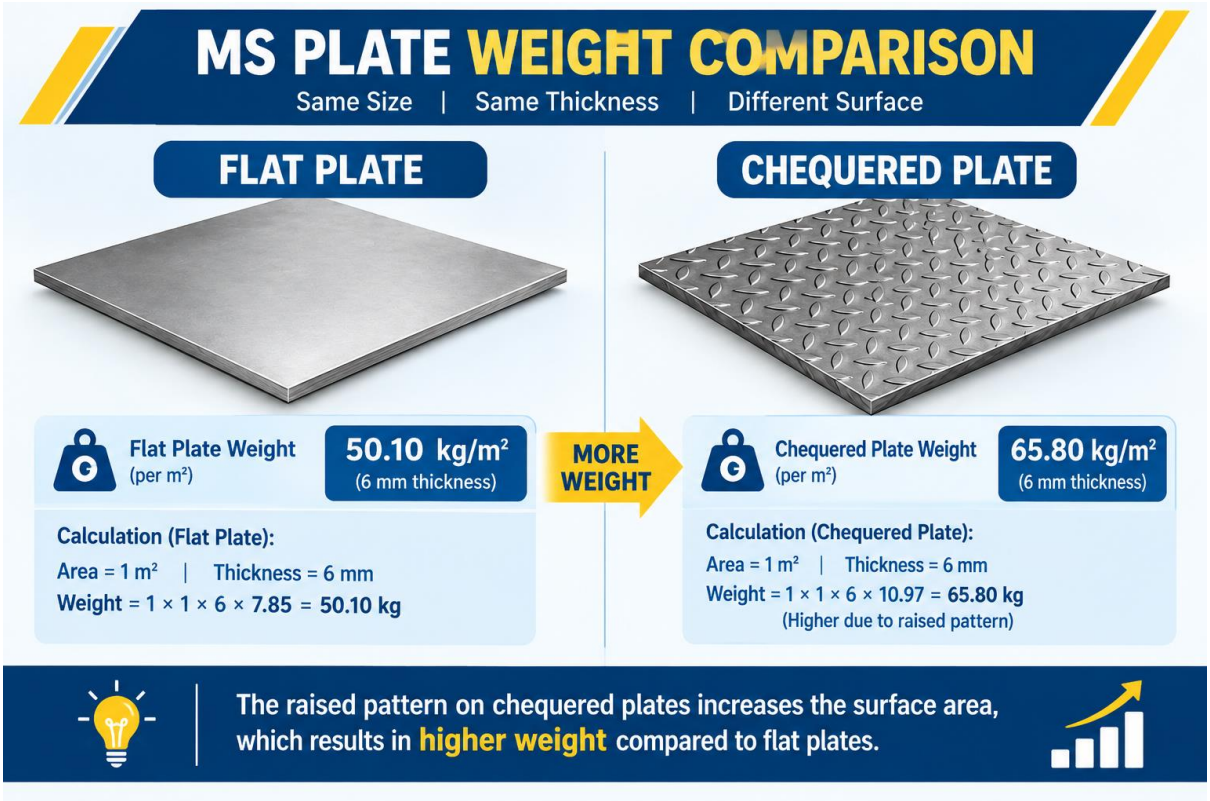
Unlike a plain steel plate, a chequered plate has a raised pattern on its surface. The additional patterned material contributes to the finished mass.

Therefore, there can be a difference between:

- Theoretical flat plate weight
- Nominal/reference chequered plate weight
- Actual finished supplied weight

For accurate commercial requirements, the final product specifications and actual weighment should be confirmed with the supplier.

NOMINAL VS THEORETICAL WEIGHT



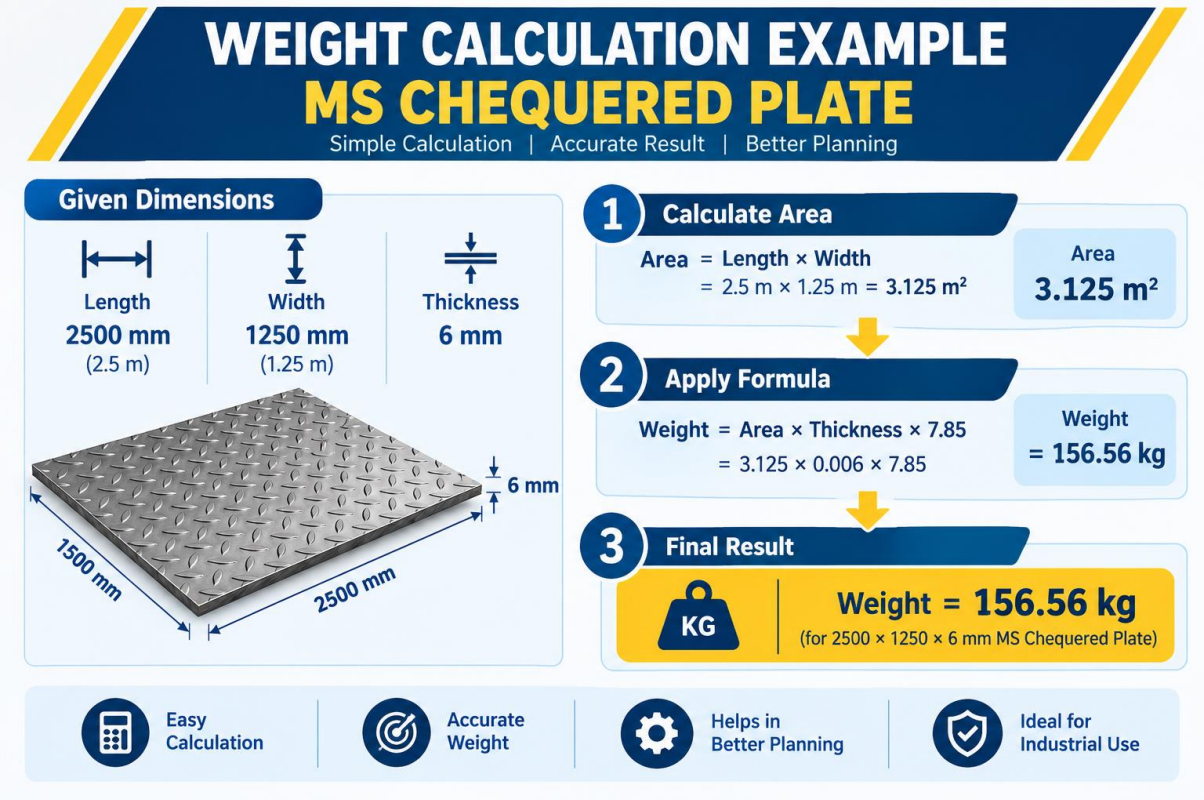
Thickness	Theoretical Flat Plate	Chequered Reference
3 mm	23.55 kg/m²	26.55 kg/m²
4 mm	31.40 kg/m²	34.40 kg/m²
5 mm	39.25 kg/m²	42.25 kg/m²

6 mm	47.10 kg/m²	50.10 kg/m²
8 mm	62.80 kg/m²	65.80 kg/m²
10 mm	78.50 kg/m²	83.40 kg/m²
12 mm	94.20 kg/m²	100.60 kg/m²

Note: Theoretical values are calculated using 7.85 as the density factor. Reference chequered values may vary according to product design and manufacturing specifications.

CALCULATION EXAMPLES

WORKED EXAMPLE: 2500 × 1250 × 6 MM



Suppose you need to estimate the weight of a chequered plate measuring:

2500 mm × 1250 mm × 6 mm

Step 1: Convert dimensions into metres

2500 mm = **2.5 m**

1250 mm = **1.25 m**

Step 2: Calculate plate area

2.5 × 1.25 = **3.125 m²**

Step 3: Use the reference weight

Reference value for 6 mm = **50.10 kg/m²**

Step 4: Calculate approximate plate weight

3.125 × 50.10

= **156.56 kg**

Result

Approximate reference weight = 156.56 kg per plate

CALCULATION FOR MULTIPLE PLATES

If one plate weighs approximately 156.56 kg:

Quantity	Approximate Total Weight
1 plate	156.56 kg
5 plates	782.80 kg
10 plates	1,565.60 kg
20 plates	3,131.20 kg
50 plates	7,828.00 kg

Example: 10 Plates

156.56 × 10

= **1,565.60 kg**

1,565.60 ÷ 1,000

= **1.5656 metric tonnes**

Therefore, 10 plates have an estimated reference weight of approximately:

1.566 metric tonnes

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4 × 8 FEET MS CHEQUERED PLATE WEIGHT

A standard 4 × 8 feet plate has an approximate area of:

32 square feet

or approximately:

2.973 m²

Reference weights for selected thicknesses are:

Thickness	Approx. Weight for 4 × 8 ft
3 mm	78.9 kg
5 mm	125.5 kg
6 mm	148.8 kg
8 mm	195.4 kg

Actual finished weight can vary depending on the product specification and pattern.

WEIGHT PER SQUARE FOOT

One square metre is approximately:

10.7639 square feet

Therefore:

kg/m² ÷ 10.7639 = kg/ft²

For example:

50.10 kg/m² ÷ 10.7639

= approximately **4.66 kg/ft²**

This conversion can be useful for projects where dimensions are specified in feet and inches.

KG TO METRIC TONNE CONVERSION

For bulk material calculations:

1 metric tonne = 1,000 kg

Therefore:

Kilograms ÷ 1,000 = Metric Tonnes

Example:

2,500 kg ÷ 1,000

= **2.5 metric tonnes**

MS CHEQUERED PLATE SPECIFICATIONS

The exact specification depends on the project and purchase requirement. Commonly requested details include:

Specification	Common Options
Material	Mild Steel
Manufacturing	Hot Rolled
Surface	Raised Chequered Pattern
Thickness	3 mm to 12 mm and as required
Width	1250 mm, 1500 mm, 2000 mm and custom
Length	2500 mm, 5000 mm, 6000 mm and custom
Common Grades	IS 2062, ASTM A36 and equivalent grades
Patterns	5-Bar, Diamond, Lentil / Teardrop

Exact grade, thickness, dimensional tolerance, pattern and availability should be confirmed before ordering.

COMMON CHEQUERED PLATE PATTERNS

5-Bar Pattern

The 5-Bar pattern is commonly used for industrial flooring, platforms, staircases and walkways where a raised textured surface is required.

Diamond Pattern

Diamond-patterned plates provide a textured surface and are used in various industrial, fabrication and flooring applications.

Lentil / Teardrop Pattern

Lentil or teardrop patterns provide a raised surface design and can be selected according to application and product availability.

Pattern availability can vary according to manufacturer, thickness and production requirements.

APPLICATIONS OF MS CHEQUERED PLATES

MS chequered plates are commonly used in:

Industrial Flooring

Suitable for selected factory floors, maintenance areas and industrial working platforms.

Staircases

Used for industrial stair treads and access structures where a textured metal surface is required.

Walkways

Used for access walkways and elevated maintenance areas.

Platforms

Suitable for machine platforms, maintenance platforms and industrial structures.

Ramps

Used in selected ramps where a durable textured surface is beneficial.

Trailers and Transportation Equipment

Used in selected fabricated transportation structures and vehicle applications.

Machine Areas

Can be used around industrial machinery and maintenance zones.

BENEFITS OF MS CHEQUERED PLATES

- Durable mild steel construction
- Raised textured surface
- Suitable for many industrial applications
- Easy to fabricate and cut
- Available in different thicknesses
- Multiple pattern options
- Suitable for platforms and walkways
- Useful for stairs and ramps
- Available in standard and custom dimensions
- Practical solution for many fabrication requirements

FACTORS THAT AFFECT ACTUAL WEIGHT

The final weight of a chequered plate may depend on several factors.

1. Nominal Thickness

A greater nominal thickness generally results in greater weight per square metre.

2. Length and Width

Larger dimensions increase the total amount of steel and therefore increase the total weight.

3. Raised Pattern

The pattern geometry and raised material can affect the finished weight.

4. Pattern Height

Different pattern designs and heights may result in different finished masses.

5. Manufacturing Tolerance

Actual thickness and dimensions can vary within the applicable manufacturing tolerance.

6. Material Density

The density factor used for theoretical calculations can affect the estimated value.

7. Surface Condition

Scale, finishing and processing conditions may have an effect on final weighment.

8. Cutting and Fabrication

When a full plate is cut into smaller pieces, the weight of each piece depends on its final dimensions.

PLAIN MS PLATE VS CHEQUERED MS PLATE

Feature	Plain MS Plate	Chequered MS Plate
Surface	Flat	Raised Pattern
Texture	Smooth	Textured
Grip	Generally lower	Generally higher
Common Applications	Fabrication & structures	Flooring & access areas
Pattern	No	Yes
Weight	Mainly based on thickness	Can be higher due to raised pattern

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HOW TO SELECT THE RIGHT THICKNESS

The required thickness should be selected according to the intended application and engineering requirements.

Consider:

- Expected load
- Span between supports
- Foot traffic
- Equipment movement
- Impact conditions
- Required rigidity

- Fabrication requirements
- Environmental conditions
- Structural design requirements

For structural or load-bearing applications, thickness should be determined using appropriate engineering calculations and project specifications.

HOW TO ORDER MS CHEQUERED PLATES

When requesting a quotation, provide complete product information.

Required Information

Product: MS Chequered Plate

Grade: Required grade

Thickness: Required thickness

Width: Required width

Length: Required length

Pattern: 5-Bar / Diamond / Lentil / Other

Quantity: Number of plates or total weight

Delivery Location: Required destination

Providing complete details helps the supplier prepare an accurate quotation.

PRICE FACTORS FOR MS CHEQUERED PLATES

The price of mild steel chequered plates can change according to market conditions and product requirements.

Common price factors include:

- Steel market price
- Grade

- Thickness
- Plate dimensions
- Pattern
- Quantity
- Cutting requirements
- Surface condition
- Freight
- Delivery location
- Taxes and applicable charges

Steel prices can fluctuate, so customers should request the latest quotation based on their exact requirements.

QUALITY & DOCUMENTATION

Depending on the project requirements, customers may request:

- Material Test Certificate
- Chemical Composition
- Mechanical Properties
- Heat Number
- Dimensional Inspection
- Weight Details
- Mill Certificate
- Test Reports
- Packing List
- Commercial Invoice

Documentation depends on the purchase order, project requirements, applicable standards and destination.

FREQUENTLY ASKED QUESTIONS

1. What is the weight of a 3 mm MS chequered plate per square metre?

The approximate reference value used in this guide is **26.55 kg/m²**. Actual finished weight may vary depending on product specifications and pattern geometry.

2. What is the weight of a 4 mm chequered plate per square metre?

The approximate reference value is **34.40 kg/m²**.

3. What is the weight of a 5 mm chequered plate per square metre?

The approximate reference value is **42.25 kg/m²**.

4. What is the weight of a 6 mm chequered plate per square metre?

The approximate reference value is **50.10 kg/m²**.

5. How is the theoretical weight of a steel plate calculated?

For a theoretical flat mild steel plate:

Weight (kg) = Length (m) × Width (m) × Thickness (mm) × 7.85

For a chequered plate, the raised pattern can increase the finished weight.

6. Why can chequered plate weight differ from theoretical weight?

A chequered plate has a raised surface pattern containing additional material. Manufacturing tolerances, dimensions, pattern geometry and other product characteristics can also affect the final weight.

7. What is the weight of a 4 × 8 feet chequered plate?

The weight depends on thickness. For example, using the reference values in this guide, a 6 mm 4 × 8 feet plate is approximately **148.8 kg**.

8. What grades are commonly specified for MS chequered plates?

Commonly specified materials can include **IS 2062, ASTM A36 and equivalent grades**, depending on project requirements.

9. Where are MS chequered plates used?

They are commonly used for flooring, platforms, staircases, walkways, ramps, machine areas, trailers and various fabrication applications.

10. Is the weight chart exact?

No. The values are **approximate reference values**. Actual supplied weight should be confirmed according to the manufacturer's product specifications and final weighment.

IMPORTANT NOTE

This PDF is intended as a general reference guide for estimating MS chequered plate weights.

The weight values may differ from actual supplied products due to variations in dimensions, nominal thickness, raised pattern geometry, manufacturing tolerances, material specifications and manufacturer practices.

For commercial purchasing, structural calculations, transportation planning and billing, users should verify the exact product specifications and actual weight with the manufacturer or supplier.

REQUEST A QUOTATION

For an accurate quotation, provide:

Product: MS Chequered Plate
Grade: Required Grade
Thickness: Required Thickness
Size: Length × Width
Pattern: Required Pattern
Quantity: Required Quantity
Delivery Location: Destination

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Contact our team with your required product specification, quantity and delivery location.

END OF PDF

MS Chequered Plate Weight Chart 2026

Reference Guide for Weight Calculation, Estimation and Product Specifications