

# Patriot® Product Specification

**A serrated steel snowplow blade system. Guaranteed at least 4 times wear life of steel blade. References and case studies can be provided.**

## **Product Description:**

**The Patriot® steel snow plow blade system shall be an engineered system comprised of an abrasion resistant serrated steel blade with heavy duty Winter Carbide Matrix® wear bars securely welded on the back to form a single engineered blade assembly. The wear bars are consecutively welded to the back of the serrated steel blade. The wear bars provide an exceptional extra protective wear edge over majority of the blade. The Patriot® Steel Blade System also includes (2) Plow Guards that have 1-1/8” heavy duty Winter Carbide Matrix® along the length of the guard, all mounting hardware (with thread locking fasteners), and installation instructions. All components are crated together in a palletized package.**

## **Product Specification Details:**

### **1. WEAR LIFE**

- 1.1 Product shall be guaranteed to last a minimum of four times (4X) longer than a standard steel blade (standard blade defined as 3/4” x 6” steel blade).

### **2. REFERENCES**

- 2.1 Manufacturer shall provide references for the system upon request validating wear life.

### 3. PACKAGING

- 3.1 All blade system components are to be provided in a single box or crate comprising of:
  - a. All blade sections manufactured per specifications.
  - b. (2) Plow Guards
  - c. (1) Grade 8 hardware kit including thread locking fasteners, flat washers, extended shoulder carriage bolts, and plow bolts.
- 3.2 Installation instructions included in package.
- 3.3 The blade system package is to be securely banded to a pallet providing adequate protection for common freight carrier handling, transportation, and receiving.
- 3.4 Packaging will provide adequate protection from the elements incurred during normal transportation and storage.

### 4. MAIN BLADE

- 4.1 The blade shall be high strength structural grade hot rolled flat steel.
- 4.2 Dimensions: 7" high x 5/8" thick x 3' or 4' length
- 4.3 Tolerance between hole spacing is +/- 1/16", non-accumulative, from center to center across full length of blade.
- 4.4 Hole size and location of holes shall be per customer's requirements.

### 5. CAST WEAR BARS

- 5.1 High impact Grade A-22 steel casting.
- 5.2 Wear bars will have a cavity of Winter Carbide Matrix® to be 7/8" min. in height for the full length of the casting.
- 5.3 Winter Carbide Matrix® must be fused to impact bar.
- 5.4 Each wear bar must contain a minimum of 10.00 in<sup>3</sup> of Winter Carbide Matrix®.

### 6. ASSEMBLY WELDING

- 6.1 A 3' blade section will have two (2) wear bars and the 4' section will have three (3) wear bars securely welded onto the blade. This weld will provide adequate strength to retain the wear bars while in service.

## 7. PLOW GUARDS

- 7.1 High impact ASTM Grade A-36 Hot rolled bar, 1 1/8" in thickness.
- 7.2 Guard will have Winter Carbide Matrix® weld 7/8" min. in height for the full length of the 1 1/8" thick steel base.
- 7.3 Mounting holes to be drilled 11/16" diameter, then counter-sunk with square punched to accept 5/8" Plow Bolts for flush mounting to blades.
- 7.4 Guards will be Class 7 Orange™ texture powder coated to provide corrosion resistance and safer handling.

## 8. MOUNTING HARDWARE

- 8.1 The mounting hardware will consist of high-quality thread locking components consisting of Grade 8 plow bolts, all metal lock nuts, and flat washers. All items to be pre-counted and sealed for corrosion resistance.

## 9. FINISHED PRODUCT

- 9.1 Finished blade will be Class 7 Orange™ texture powder coated to provide corrosion resistance and safer handling.
- 9.2 Front edge of blade will be identified to avoid improper installation.
- 9.3 Finished blade shall comply with standard blade manufacturing tolerances.
- 9.4 Manufacturer's literature shall be furnished as required.

### Example of an 11 ft system

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	PT2041514MED	Blade	4
2	PT2031514MED	Blade	2
3	PS8412X	PlowGuard	2
Not Shown	KT-RM-12	Bolt Kit	1

KT-RM-12 includes:  
 (12) 5/8" x 3" Plow Bolts  
 (6) 5/8" x 3-1/2" Plow Bolts  
 (19) Lock Nuts  
 (19) Washers

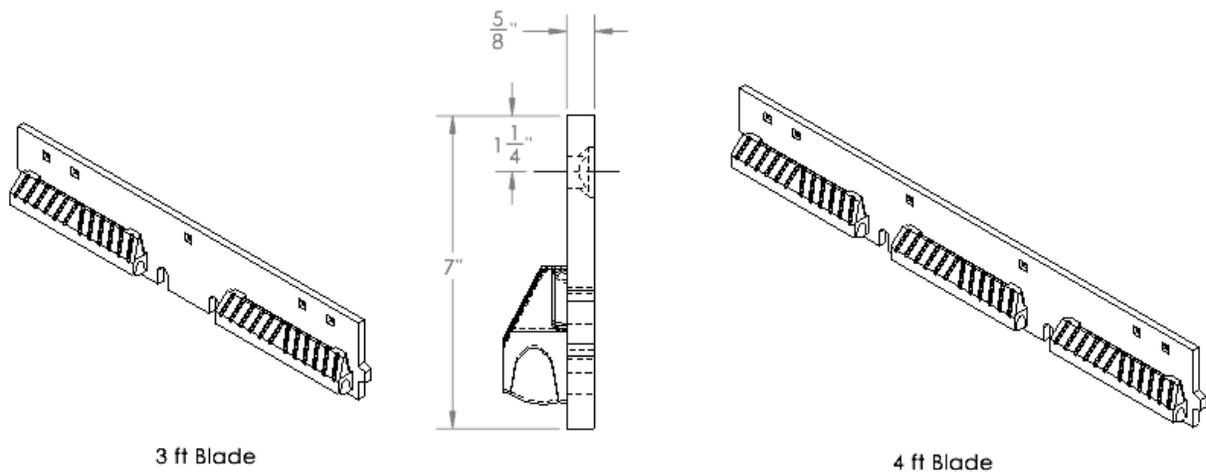
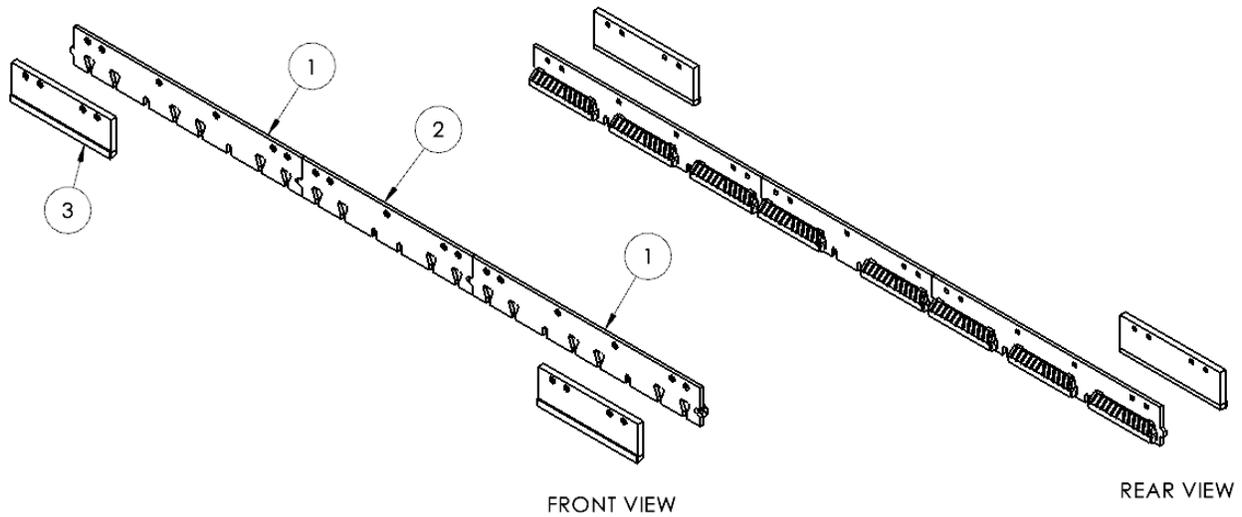


Image above shows an overview of components.