



Manuals.plus /

› ALVIN /

› ALVIN P477, 8" Semicircular Protractor Instruction Manual

ALVIN P477

ALVIN P477 8" Semicircular Protractor Instruction Manual

Model: P477 | Brand: ALVIN

1. INTRODUCTION

The ALVIN P477 8-inch Semicircular Protractor is a precision instrument designed for accurate angle measurement and drawing. Constructed from heavy-duty 0.09-inch thick clear plastic, it features a beveled outer edge for precise line work and a center cutout finger lift for easy handling. Its die-stamped graduations are marked in 0.5-degree increments, ensuring reliable and long-lasting readability for various technical drawing, school, and drafting applications.

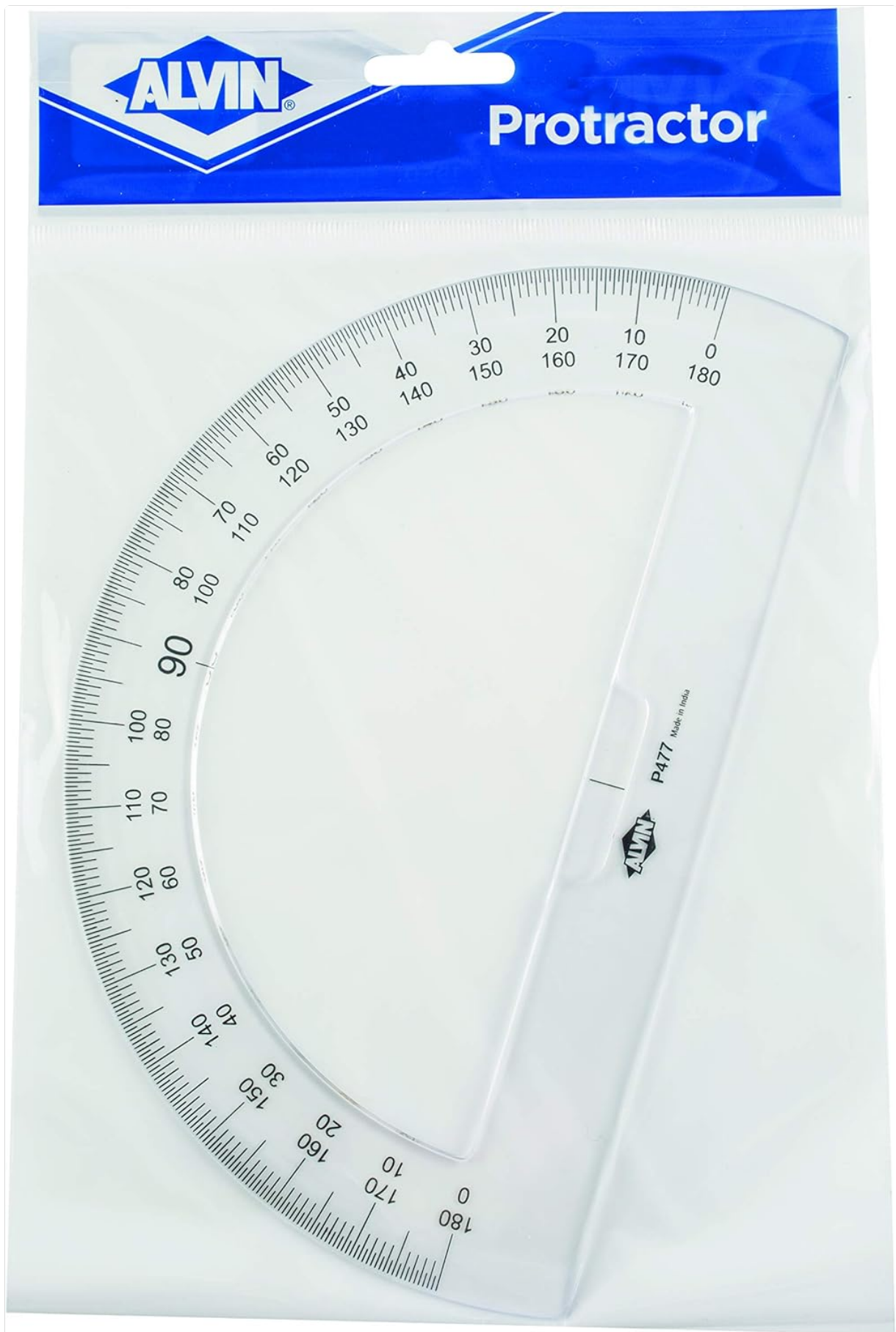


Figure 1.1: The ALVIN P477 8-inch Semicircular Protractor as packaged.

2. KEY FEATURES

- **Easy to Use:** Features a center cutout with finely beveled edges, facilitating easy lifting and maneuvering for convenient writing and drawing.

- **Durable and Long-lasting:** Manufactured from robust 0.09-inch thick polystyrene, ensuring durability. Graduations are long-lasting and easy-to-read, designed not to rub off with extended use.
- **Multipurpose Tool:** A versatile instrument suitable for students, hobbyists, and professionals. Ideal for drafting, architecture, general drawing, and other applications requiring precise angle measurements.
- **Precision Design:** Engineered for accurate and reliable measurements, featuring consistently smooth edges to ensure precision in every project.

3. SETUP

The ALVIN P477 Protractor requires minimal setup. Upon receiving the product, carefully remove it from its packaging. Inspect the protractor for any visible damage or defects that may have occurred during shipping. Ensure the surface is clean and free of debris before use to maintain accuracy.

4. OPERATING INSTRUCTIONS

The ALVIN P477 Semicircular Protractor is used for measuring and drawing angles. Follow these steps for accurate use:

1. Measuring an Angle:

- Place the protractor's center point (the small hole or crosshair at the base of the 90-degree mark) directly over the vertex (corner) of the angle you wish to measure.
- Align one of the angle's arms with the protractor's baseline (the straight edge at the bottom, marked 0 and 180 degrees).
- Read the degree measurement where the second arm of the angle intersects the protractor's curved scale. Use the inner or outer scale depending on which 0-degree mark aligns with the first arm.

2. Drawing an Angle:

- Draw a straight line that will serve as one arm of your angle. Mark a point on this line that will be the vertex of your angle.
- Place the protractor's center point over the marked vertex.
- Align the protractor's baseline with the drawn line, ensuring the 0-degree mark is at the start of your angle.
- Locate the desired angle measurement on the protractor's curved scale and make a small mark on your paper at that point.
- Remove the protractor and use a straightedge to draw a line from the vertex through the mark you just made. This completes your angle.

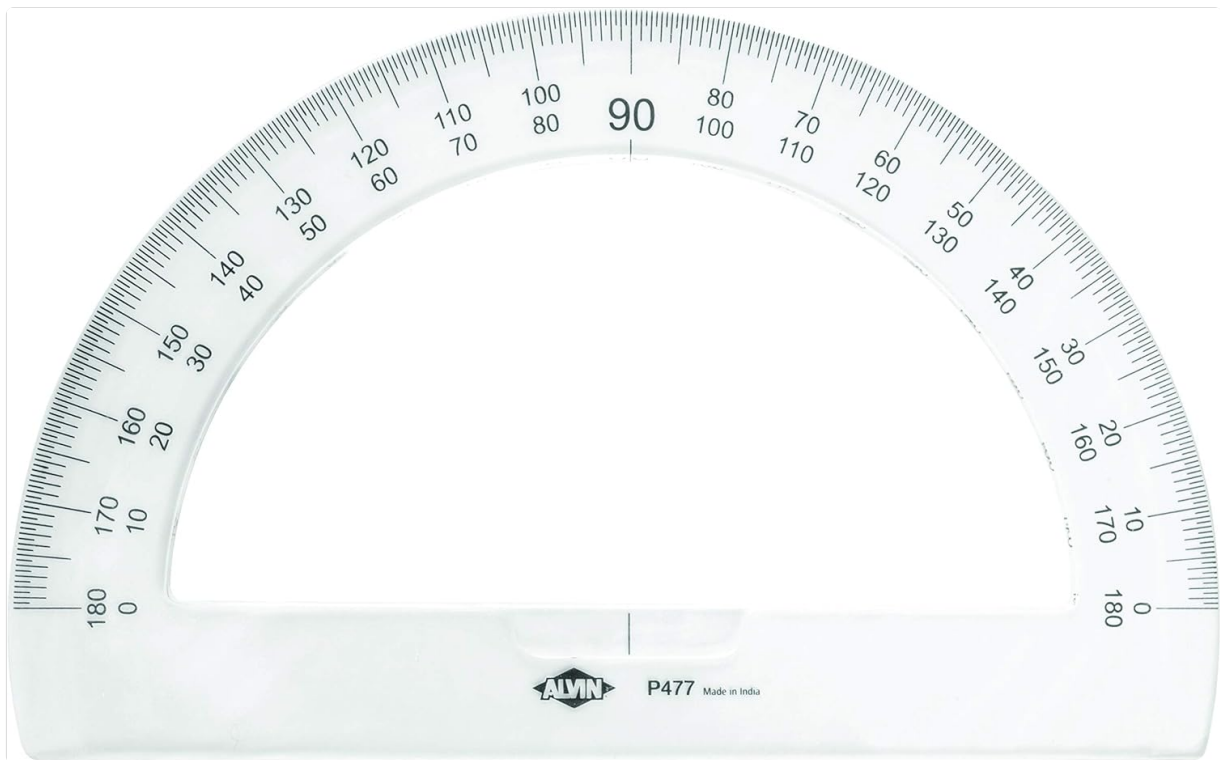


Figure 4.1: Close-up of the protractor's clear markings and design.

5. MAINTENANCE

To ensure the longevity and accuracy of your ALVIN P477 Protractor, follow these maintenance guidelines:

- **Cleaning:** Wipe the protractor with a soft, damp cloth to remove dust, pencil marks, or smudges. Avoid using abrasive cleaners or solvents, as these can damage the plastic or fade the graduations.
- **Storage:** Store the protractor flat in a clean, dry place, away from direct sunlight or extreme temperatures. Avoid placing heavy objects on top of it to prevent warping or breakage.
- **Handling:** Handle the protractor by its edges or the center cutout to minimize contact with the measurement scales, preserving their clarity.

6. TROUBLESHOOTING

The ALVIN P477 Protractor is a simple, durable tool with few potential issues. However, consider the following if you encounter problems:

- **Inaccurate Readings:** Ensure the protractor's center point is precisely aligned with the angle's vertex and the baseline is perfectly aligned with one arm. Check for any physical damage or warping of the protractor itself.
- **Faded Markings:** While designed to be long-lasting, excessive friction or exposure to harsh chemicals can potentially affect the markings over time. Ensure proper cleaning and storage as outlined in Section 5.
- **Physical Damage (Cracks/Breaks):** If the protractor is cracked or broken, its accuracy may be compromised. Replace the unit if significant damage occurs.

7. SPECIFICATIONS

Attribute	Detail
Manufacturer	ALVIN
Brand	ALVIN
Model Number	P477
Size	8"
Material	0.09-inch Thick Clear Plastic (Polystyrene)
Color	Clear
Product Dimensions	8 x 5 x 0.12 inches
Item Weight	0.8 ounces
Graduations	0.5-degree increments

8. WARRANTY INFORMATION

Specific warranty details for the ALVIN P477 Protractor are typically provided by the retailer or manufacturer at the time of purchase. For comprehensive warranty information, including terms, conditions, and duration, please refer to the documentation included with your purchase or contact ALVIN directly through their official support channels.

9. SUPPORT

For further assistance, product inquiries, or to explore other ALVIN products, please visit the official ALVIN store or contact their customer support.

- **ALVIN Official Store:** Visit the ALVIN Store on Amazon