



SERIES 90R GUIDE SPECIFICATION

ALUMINUM ADJUSTABLE PITCH REVERSIBLE FAN ASSEMBLY, TYPE AAR

The Aluminum Adjustable Pitch Reversible Fan Assembly, Type AAR, shall be manufactured by Hartzell Air Movement, Series 90R. Standard sizes are 48" through 84", 4 or 6 bladed. The propeller shall be packaged disassembled for shipment. By request they may be completely assembled, dynamically balanced and packaged ready to install.

The propeller hub, caps, and blades of balanced airfoil design shall be cast of 319 aluminum in compliance with Federal Specification QQ-A-601E and ASTM B26. The blades feature a retention shoulder which shall fit into a recess in the hub for proper location. A loose cap, similar in shape of the hub, with two radial grooves, shall be placed over the exposed blade shank. Two U-bolts, S.A.E. Grade 5, cadmium plated with Class 2A threads shall be fitted over each cap and through the hub with heavy class nuts and lock washers to securely lock each blade at its proper pitch angle. The hub shall be retained on the fan or motor shaft with a split taper bushing.

Standard rotation shall be right-hand or clockwise. Maximum standard construction operating temperature shall be 300° F. The hub and taper bushing shall be bolted together with three Grade 5 through bolts, steel backing plate and two heavy hex nuts per bolt for locking. All blades shall have manually adjustable angles by loosening the U-bolts.

The propellers shall be manufactured in accordance with Hartzell's standard quality assurance procedures. Fan performance shall be obtained by testing full or exact scale models in Hartzell's AMCA accredited test laboratory in accordance with the latest revision of AMCA Standard 210 for air performance and AMCA Standard 300 for sound.

ACCESSORIES:

- Protective Coatings - Include epoxy, coal tar epoxy, and inorganic zinc.