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Installing Metal Roofing over Asphalt Shingles

Metal Panels Inc. recommends three methods for installing metal roof panels on a building with existing asphalt shingles. The first method is to install battens on the existing shingles, the second method is to remove the shingles and the third method is to install the panels directly over the shingles. All three methods are referenced in IBC 2006, Section 1510. The roof must be capable of supporting the weight of the new metal roof panels and the loads experienced during installation. Further, the project must be designed to ensure the new roof will resist the required loads.

The first method also allows the existing shingles to remain in place. The existing roof framing must be inspected for deterioration. All deteriorated roof framing members must be removed and replaced. Battens (typically 1x boards) are then installed over the existing shingles, attaching to the roof framing members below the plywood. The battens should be shimmed to correct any areas of the roof that may be sagging or out-of-plane. New metal panels can then be installed, attaching to the battens.

The second method requires the removal of the existing shingles. This provides for a complete inspection of the existing plywood deck for deterioration. All deteriorated plywood and roof framing below the plywood must be removed and replaced. A minimum underlayment of synthetic underlayment or 30# felt must be installed over the plywood. New metal panels can then be installed on the underlayment, attaching to the plywood.

The third method allows the existing shingles to remain in place. This method can only be used if there is only one layer of existing shingles. If there are two or more layers, one of the other two methods must be used. The plywood deck and the roof framing system must be inspected for deterioration. All deteriorated plywood and roof framing below the plywood must be removed and replaced. Any sagging or unevenness in the roof should be shimmed to bring the roof back in plane. A minimum underlayment of synthetic underlayment or 30# felt must be installed over the existing shingles. New metal panels can then be installed on the underlayment, attaching through the existing shingles into the plywood.