

Practice: 367 - Roofs and Covers

Scenario # 1 Flexible Roof

Scenario Description:

Louisiana

A flexible membrane or fabric-like roof placed on a steel truss hoop-like supports and supporting foundation. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

Associated practices include Waste Storage Facility (313), Animal Mortality Facility (316), Composting Facility (317), Roof Runoff Structure (558), and Waste Treatment (629).

Before Practice Situation:

Applicable where the exclusion of precipitation from an animal waste storage and/or treatment facility will improve of an existing or planned system. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

After Practice Situation:

A flexible membrane or fabric-like roof placed on a steel truss hoop-like supports and supporting foundation. Roof or cover will be engineered and installed in accordance with appropriate building codes and permits. Typical size is 1,000 square feet and is over an approved animal waste management facility as a component of a CNMP. It is designed to prevent precipitation to allow proper management of animal waste streams (manure or compost streams), thus mitigating the negative factors from the "before practice implementation".

Scenario Feature Measure:

Footprint of the building

Scenario Typical Size:	1000	Square Foot	Unit Cost	\$7.76
-------------------------------	------	-------------	-----------	--------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Roof, Hoop Truss Arch Structure, less than 30' wide	1000	Square Foot	\$7.42	\$7,420.00
Mobilization	Mobilization, very small equipment	2	Each	\$36.97	\$73.94
Mobilization	Mobilization, medium equipment	2	Each	\$133.51	\$267.02
				Total Cost:	\$7,760.96

Practice: 367 - Roofs and Covers

Scenario # 2 Timber or Steel Sheet Roof

Scenario Description:

Louisiana

A timber framed building with a timber or steel "sheet" roof and supporting foundation. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

Associated practices include Waste Storage Facility (313), Animal Mortality Facility (316), Composting Facility (317), Agrichemical Handling Facility (309), Roof Runoff Structure (558), and Waste Treatment (629).

Before Practice Situation:

Applicable where the exclusion of precipitation from an animal waste storage and/or treatment facility will improve of an existing or planned system. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

After Practice Situation:

A timber framed building with a timber or steel "sheet" roof and supporting foundation. Engineered and installed in accordance with appropriate building codes and permits. Typical size is 1,000 square feet and is over an approved animal waste management facility as a component of a CNMP. It is designed to prevent precipitation to allow proper management of animal waste streams (manure or compost streams), thus mitigating the negative factors from the "before practice implementation".

Scenario Feature Measure:

Footprint of building

Scenario Typical Size:	1000	Square Foot	Unit Cost	\$7.47
-------------------------------	------	-------------	-----------	--------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Roof, Post Frame Building, 30' to 60' wide	1000	Square Foot	\$7.26	\$7,260.00
Mobilization	Mobilization, very small equipment	2	Each	\$36.97	\$73.94
Mobilization	Mobilization, medium equipment	1	Each	\$133.51	\$133.51
				Total Cost:	\$7,467.45

Practice: 367 - Roofs and Covers

Scenario # 3 Timber or Steel Sheet Roof Mono Slope

Louisiana

Scenario Description:

A timber framed building with a timber or steel "sheet" roof and supporting foundation. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

Associated practices include Waste Storage Facility (313), Animal Mortality Facility (316), Composting Facility (317), Agrichemical Handling Facility (309), Roof Runoff Structure (558), and Waste Treatment (629).

Before Practice Situation:

Applicable where the exclusion of precipitation from an animal waste storage and/or treatment facility will improve of an existing or planned system. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

After Practice Situation:

A timber framed building with a timber or steel "sheet" roof and supporting foundation. Engineered and installed in accordance with appropriate building codes and permits. Typical size is 1,000 square feet and is over an approved animal waste management facility as a component of a CNMP. It is designed to prevent precipitation to allow proper management of animal waste streams (manure or compost streams), thus mitigating the negative factors from the "before practice implementation".

Scenario Feature Measure:

Footprint of building

Scenario Typical Size:	1000	Square Foot	Unit Cost	\$6.27
-------------------------------	------	-------------	-----------	--------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Roof, Steel Frame Monoslope Building, greater than 60' wide	1000	Square Foot	\$6.10	\$6,100.00
Mobilization	Mobilization, very small equipment	1	Each	\$36.97	\$36.97
Mobilization	Mobilization, medium equipment	1	Each	\$133.51	\$133.51
				Total Cost:	\$6,270.48

Practice: 367 - Roofs and Covers
Scenario # 4 Steel Frame and Roof

Scenario Description:

Louisiana

A steel framed building with steel "sheet" roof and supporting foundation. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues. Associated practices includes Waste Storage Facility (313), Animal Mortality Facility (316), Composting Facility (317), Roof Runoff Structure (558), and Waste Treatment (629).

Before Practice Situation:

Applicable where the exclusion of precipitation from an animal waste storage and/or treatment facility will improve of an existing or planned system. Manure is stored as a liquid in basins, tanks, and as a solid on concrete and earthen surfaces. Excess precipitation can cause premature filling of storages or cause nutrients to leach from solid manure piles leading to uncontrolled runoff as well as odor issues.

After Practice Situation:

A steel framed building with steel "sheet" roof and supporting foundation. Engineered and installed in accordance with appropriate building codes and permits. Typical size is 10,000 square feet and is over an approved animal waste management facility as a component of a CNMP. It is designed to prevent precipitation to allow proper management of animal waste streams (manure or compost streams), thus mitigating the negative factors from the "before practice implementation".

Scenario Feature Measure:

Footprint of building

Scenario Typical Size:	10000	Square Foot	Unit Cost	\$6.13
-------------------------------	-------	-------------	-----------	--------

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Materials	Roof, Steel Frame Monoslope Building, greater than 60' wide	10000	Square Foot	\$6.10	\$61,000.00
Mobilization	Mobilization, very small equipment	2	Each	\$36.97	\$73.94
Mobilization	Mobilization, medium equipment	2	Each	\$133.51	\$267.02
				Total Cost:	\$61,340.96