

Unit 9 Insulation and Sheetrock Installation

Content Area: **Industrial Technology**
Course(s): **Construction Technology I**
Time Period: **4th Marking Period**
Length: **Weeks**
Status: **Published**

Unit Overview

The students will identify the importance and correct installation of insulation in a home.

The students will identify the importance and correct installation of sheetrock in a home and how to repair small holes.

Transfer

Students will be able to independently use their learning to...

-Install Insulation and Sheetrock in their home?

Repair small holes or cracks in Sheetrock in their home.

For more information, read the following article by Grant Wiggins.

http://www.authenticeducation.org/ae_bigideas/article.lasso?artid=60

Meaning

Student can install insulation and sheetrock in their homes and pursue this building trade if they decide to make it a Career Decision.

Student can repair a damaged portion of sheetrock with techniques that are demonstrated.

Understandings

Students will understand that...

Insulation is crucial in maintaining temperature in a residence, and that the lack of insulation could cost them money in energy bills.

Correct sheetrock installation adds to the aesthetic appearance and maintenance of the residential home.

How they can save money by installing their own sheetrock or by repairing it.

Essential Questions

Students will keep considering...

-Why is it important that I know how to install insulation?

Why is it important that I can install and repair sheetrock?

Can I use the skills I have learned to make a decision when I purchase a home.

Application of Knowledge and Skill

Students will be able to install insulation and sheetrock with the proper fasteners and techniques.

Students will be able to make home repair and home buying decisions.

Students will know...

Students will know...

The correct technique and fastening methods for installing insulation and Sheetrock.

Students will be skilled at...

Students will be skilled at...

Students will be skilled at measuring and layout on insulation and sheetrock.

Students will be able to cut insulation to the proper size with a utility knife.

Students will be able to cut out sheetrock with a sheetrock saw to install around electrical outlets, lights and plumbing fixtures.

Students will be able to install insulation and sheet rock with the proper fasteners and spacing.

Students will be able to repair holes or nail pops in sheetrock.

Students will be able to apply sheetrock tape and spackle.

Academic Vocabulary

Thermal, Gypsum, Expansion, Contraction

Target 1

SWBAT identify and describe the purpose of having the proper r value insulation in the residential home.

Target 2

SWBAT install insulation in a wall with the proper techniques, cutting tools and fasteners.

Learning Goal 2

Sheetrock Installation and Repair.

9.3.12.AC.1	Use vocabulary, symbols and formulas common to architecture and construction.
9.3.12.AC.2	Use architecture and construction skills to create and manage a project.
9.3.12.AC.4	Evaluate the nature and scope of the Architecture & Construction Career Cluster and the role of architecture and construction in society and the economy.
9.3.12.AC.5	Describe the roles, responsibilities, and relationships found in the architecture and construction trades and professions, including labor/management relationships.
9.3.12.AC.6	Read, interpret and use technical drawings, documents and specifications to plan a project.
9.3.12.AC.7	Describe career opportunities and means to achieve those opportunities in each of the Architecture & Construction Career Pathways.
9.3.12.AC-CST	Construction
9.3.12.AC-CST.2	Describe the approval procedures required for successful completion of a construction project.
9.3.12.AC-CST.4	Apply scheduling practices to ensure the successful completion of a construction project.
9.3.12.AC-CST.5	Apply practices and procedures required to maintain jobsite safety.
9.3.12.AC-CST.9	Safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.
9.3.12.AC-DES.6	Apply the techniques and skills of modern drafting, design, engineering and construction to projects.
9.3.12.AC-MO.1	Recognize and employ universal construction signs and symbols to function safely in the workplace.

Target 1

SWBAT measure, layout any cuts and cut sheetrock with a utility knife and a sheetrock saw.

Target 2

SWBAT install sheetrock on framed wall and attach with proper fasteners.

Learning Goal 3

Taping and Spackling of Sheetrock.

9.3.12.AC.3	Comply with regulations and applicable codes to establish and manage a legal and safe workplace.
9.3.12.AC.7	Describe career opportunities and means to achieve those opportunities in each of the

Architecture & Construction Career Pathways.

9.3.12.AC-CST.3

Implement testing and inspection procedures to ensure successful completion of a construction project.

9.3.12.AC-CST.9

Safely use and maintain appropriate tools, machinery, equipment and resources to accomplish construction project goals.

Target 1

SWBAT apply sheetrock tape to cover any joints between the sheets.

Target 2

SWBAT apply spackle to any joints, nail or screw holes and sand when dried.

Target 3

SWBAT to repair a hole in sheetrock with the proper techniques.

Summative Assessment

Students will pass a test on Insulation and Sheetrock.

21st Century Life and Careers

Select all applicable standards from the applicable standards

CAEP.9.2.12.C

Career Preparation

CAEP.9.2.12.C.1

Review career goals and determine steps necessary for attainment.

CAEP.9.2.12.C.3

Identify transferable career skills and design alternate career plans.

CAEP.9.2.12.C.4

Analyze how economic conditions and societal changes influence employment trends and future education.

CAEP.9.2.12.C.6

Investigate entrepreneurship opportunities as options for career planning and identify the knowledge, skills, abilities, and resources required for owning and managing a business.

CAEP.9.2.12.C.7

Examine the professional, legal, and ethical responsibilities for both employers and employees in the global workplace.

Formative Assessment and Performance Opportunities

Students will be graded by observation of the instructor on the correct installation of Insulation.

Students will be graded by observation of the instructor on the correct installation of Sheetrock, Tape and Spackle.

Students will be graded by observation of the instructor on the correct repair of sheetrock hole.

Accommodations/Modifications

Students with Accommodations/Modifications can be assisted by other students that have completed the hands on tasks.

Students with Accommodations/Modifications can retest if they fail or select to retake the test with a Special Needs Teacher.

Unit Resources

Online You Tube Videos and Tests in Google Classroom pertaining to Insulation and Sheetrock.

Interdisciplinary Connections
