

# Glaziers

## ✓ Windshield Repair

Glaziers cut, fit, install and replace glass in residential, commercial and industrial buildings, on exterior walls of buildings and other structures and in furniture and other products. They are employed by construction glass installation contractors, retail service and repair shops and glass fabrication shops, or they may be self-employed. To learn more about this occupation, [click here](#).

Check out the VECTOR work video before completing the tasks. Choose [video](#) or [video with subtitles](#).

### NOC 7292 – Glaziers



Web Page



Recorded Tasks and Responses



Video

### Essential Skills Focus

1 2 3

Oral Communication

Finding Information

## 1. Tasks

**Glaziers repair/remove and install windshields in vehicles that require repairs. They are prepared to answer customer questions.**

**Go to the Web page [www.bestglass.com](http://www.bestglass.com) and click on the link for Facts & FAQ. Listen to the customer's questions in the Tasks below.**

### Task 1

Listen to **Audio 1**.

"They tell me I have a 4-inch Star Break in my windshield and I have been told by another autobody shop that my windshield can be repaired rather than replaced. Please have a look at the windshield and give me your opinion."

- When you are ready, record your response to the customer.
- Play it back and re-record if you would like to change it.
- When you are satisfied with your response, listen to the glazier talking in **Audio 6**.
- Compare the two audio clips.
- If you see ways in which yours can be improved, record it again.

*Oral Communication*



## Task 2

Listen to **Audio 2**

“How long will it take to replace my windshield?”

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **Audio 7**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

*Oral Communication*

## Task 3

Listen to **Audio 3**

“I need my car by noon today. It is 9:00 a.m. now. Is there any way I can have it back and safely drive it by then? Can you explain how this can be done?”

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **Audio 8**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

*Oral Communication and Finding Information*

## Task 4

Listen to **Audio 4**

“My Insurance Company recommends OEM glass for windshield replacement. What is OEM glass and why is it important?”

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **Audio 9**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

*Oral Communication and Finding Information*

## Task 5

Listen to **Audio 5**

“How do you ensure proper installation?”

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **Audio 10**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

*Oral Communication and Finding Information*



## Facts and Frequently Asked Questions

Below is a listing of the most frequently asked questions we encounter. Please click the specific question to see the answer.

1. Can my windshield be repaired or do I need to replace it?
2. Does my windshield really protect me?
3. What is OEM glass?
4. What are FMVSS and why are they important to me?
5. How long will it take to replace my windshield?
6. What should I look for when my windshield is replaced?
7. What kind of warranty should I expect?
8. How soon can I drive my car after my glass is replaced?
9. How soon can I wash my vehicle?
10. I just had my windshield replaced. How do I know if it was done right?
11. I called around and got cash prices on my windshield. Why is there such a big difference in price?
12. How can some companies afford to waive my deductible, give me free dinners and still do quality work?
13. This is my third broken windshield. Will my insurance rates go up if I get it replaced?
14. What is the Consumers Right to Choose?
15. What is safety glass and why do I need it in my home or office?
16. What are dual pane/insulated units?
17. Only 1 side of my dual pane window broke, so why do I have to replace both pieces?

1. Can my windshield be repaired or do I need to replace it? The National Glass Association recommends that any windshield damage be fixed as soon as possible. Most 'dings' or 'chips' can be repaired if the damage is not in the driver's line of vision and is smaller than the size of a 50 cent piece, including any cracks. This could save you or your insurance company hundreds of dollars. If the break is larger or in the driver's line of vision, most insurance companies recommend replacement. Best Glass provides both services for your convenience.

[Back to Top](#)

2. Does my windshield really protect me? Yes. Your windshield was designed as the number one safety restraint system in your vehicle. Auto manufacturers say your windshield provides up to 60 percent of the roof crush protection in a rollover accident. It also provides the backstop support for your passenger-side airbag in a front-end collision. If your windshield pops out in a collision or rollover, you could be ejected or crushed. It's important to know who's replacing your windshield. Your life could depend on it.

[Back to Top](#)

Retrieved from <http://www.bestglass.com>



3. What is OEM glass? OEM stands for Original Equipment Manufacture. OEM glass is produced from original equipment-style tooling and meets the manufacturer specifications for safety and quality. Only OEM glass can insure proper fit and finish which greatly reduces the possibility of air or water leaks. Most importantly, only OEM glass is designed specifically to meet the safety standards necessary for your protection in an accident. You should always use OEM glass to insure your safety. If you are making an insurance claim to pay for your windshield replacement, you are most likely entitled to OEM glass. You've paid for it in your policy.

[Back to Top](#)

4. What are FMVSS and why are they important to me? FMVSS stands for Federal Motor Vehicle Safety Standards. They are standards set by the National Highway Traffic Safety Association relating to vehicle safety. A number of these standards set minimum requirements for windshield retention in vehicle accidents. Because the windshield is the most important safety restraint system in a vehicle, it's critical that the windshield not come out in an accident. If that were to occur, the passenger compartment would be compromised, occupants could be ejected and the roof could collapse. Any of these scenarios would result in serious injury and possibly death. As a result, FMVSS must be adhered to with every windshield installation. The only way to meet these standards is by strictly following the vehicle manufacturers' preferred installation methods. These include, performing full cutout procedures, utilizing OEM glass, applying the necessary primers and using only the approved adhesives that provide the proper safe drive-away times. FMVSS were created and are in place to save your life. Unfortunately, not all glass companies comply. It's up to you to make sure your glass replacement company adheres to them. No one else will.

[Back to Top](#)

5. How long will it take to replace my windshield? That depends on the make and model of your vehicle. Because of the complexity of some vehicles, it could take as long as 3 hours. Most vehicles, however, require about an hour to an hour and a half to properly install the windshield. Auto manufacturers recommend a full cutout method when replacing a windshield. This method takes a little longer than what has been popular with most technicians in the past. As with most things worth having, quality takes time. If an installer claims he can install your windshield in 30 minutes or less, it's a sure bet it won't be done right and certainly not safe.

[Back to Top](#)

Retrieved from <http://www.bestglass.com>



6. What should I look for when my windshield is replaced? The first thing to look for is a company that has a good reputation and a proven service record. Next make sure they are using OEM glass and have certified technicians. If you start with the right company, you're half way there. When the installer comes out, ask questions. Questions about when you'll be able to safely drive your vehicle and what kind of urethane he'll be using. He should be knowledgeable enough to answer any questions you may have. Make sure that he'll do a factory recommended full cutout instead of the quicker short-cut method. The installer should carefully clean and always prime the windshield before installation. He should also use suction cups or at least disposable gloves while installing the windshield to insure that the adhesive surface of the glass does not become contaminated. Missing any of these steps could result in an improper or unsafe installation. After an accident is the wrong time to find out your windshield was improperly installed.

Back to Top

7. What kind of warranty should I expect? You should expect to get a written warranty that covers defects in materials and workmanship including water and air leaks. It should be for at least a year. Many shops offer a limited lifetime warranty for as long as you own your car. If you have a problem after their installation, a phone call to the shop should be all that's needed to have someone take care of the problem. Don't be shy about asking for a warranty. Your safety and peace of mind are worth it.

Back to Top

8. How soon can I drive my car after my glass is replaced? This will depend on the type of urethane adhesive used to install the glass in your vehicle. While most automotive grade urethanes rely on temperature and humidity to cure, the time required varies widely depending on the manufacturer. This time frame can range from 3 hours up to 24 hours before your vehicle will meet Federal Motor Vehicle Safety Standards and is considered safe to drive. If you need to drive your vehicle sooner, a chemically cured urethane can be used that will allow a 1 hour drive-away time. In either case, it's imperative that you follow the manufacturers' instructions regarding safe drive-away times. Not adhering to those instructions could result in your injury or even death. It is extremely important that the technician replacing your automotive glass explain to you when you are able to SAFELY drive your car.

Back to Top

9. How soon can I wash my vehicle? It is recommended that you wait 24 hours before washing your vehicle. There are 2 reasons for this. First, the high pressure from automatic car washes can damage the seal and outer moldings before the urethane has a chance to cure sufficiently. Secondly, it's important to leave at least one of the windows open at least an inch to reduce the pressurization in the vehicle when the doors are shut. This prevents the pressure inside the cabin from blowing a hole in the urethane seal, causing an air or water leak. Water on the windshield is not the concern. In fact, if it should rain, don't fear. The moisture actually helps the curing process of the urethane sealant.

Back to Top

Retrieved from <http://www.bestglass.com>

## 2. Answer Key

### Essential Skills Focus

#### Task 1

Listen to **AUDIO 1**


“They tell me I have a 4-inch Star Break in my windshield and I have been told by another autobody shop that my windshield can be repaired rather than replaced. Please have a look at the windshield and give me your opinion.”

- a) When you are ready, **record** your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to the glazier talking in **AUDIO 6**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

#### Answer

**Answers will vary. Sample Answer AUDIO 6**

**“Since the damage is in the driver’s line of vision and larger than a coin, replacement of the windshield is recommended.”**

 Check **page 12** for one way to get this answer.

Oral Communication ②

Finding Information ①

Computer Use ②

Document Use ②

Reading Text ②

Decision Making ①

## Task 2

Listen to **AUDIO 2**

“How long will it take to replace my windshield?”


- a) When you are ready, **record** your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **AUDIO 7**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

## Answer

**Answers will vary. Sample Answer AUDIO 7**

**“It will take an hour to an hour and a half.”**

- 1. Identify the problem: Customer wants to know how long the repair will take.**
- 2. Determine the goal: Provide information so the customer can make a decision.**
- 3. Decide on actions: Search the webpage to find the information the customer needs.**
- 4. Set up solution: find information at [www.bestglass.com](http://www.bestglass.com).**

 Check **page 14** for one way to get this answer.

Oral Communication ①

Finding Information ①

Computer Use ②

Document Use ②

ReadingText ①



## Task 3

Listen to **AUDIO 3**

"I need my car by noon today. It is 9:00 a.m. now. Is there any way I can have it back and safely drive it by then? Can you explain how this can be done?"

- a) When you are ready, **record** your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **AUDIO 8**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

## Answer

**Answers will vary. Sample Answer AUDIO 8**

**"We can use a chemically cured urethane that dries in 1 hour. Your vehicle should be ready by 11:30 with the hour and a half installation time plus the drying time for the urethane."**



Check **page 15** for one way to get this answer.

Oral Communication ②

Finding Information ①

Computer Use ②

Document Use ②

Reading Text ②

Decision Making ①

Scheduling or Budgeting and Accounting ①

Task 4

Listen to **AUDIO 4**

“My Insurance Company recommends OEM glass for windshield replacement. What is OEM glass and why is it important?”

- a) When you are ready, **record** your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **AUDIO 9**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

Answer

**Answers will vary. Sample Answer AUDIO 9**

**“OEM glass stands for Original Equipment Manufacture. It meets the manufacturer specifications for safety and quality. Only OEM glass can ensure proper fit and finish which reduces the possibility of air or water leaks.**



*Check page 17 for one way to get this answer.*

Oral Communication ②

Finding Information ①

Computer Use ②

Document Use ②

ReadingText ②

Task 5

Listen to **Audio 5**

“How do you ensure proper installation?”

- a) When you are ready, **record** your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **Audio 10**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

Answer

Answers will vary. Sample Answer **Audio 10**

**“We do a factory recommended full cutout instead of the quicker short-cut method. We clean and prime the windshield before installation and use suction cups or disposable gloves to make sure the adhesive surface of the glass does not become contaminated.”**



*Check page 18 for one way to get this answer.*

Oral Communication ②

Finding Information ①

Computer Use ②

Document Use ②

Reading Text ②

# 3. Answer Steps

## Task 1

Listen to **AUDIO 1**

“They tell me I have a 4-inch Star Break in my windshield and I have been told by another autobody shop that my windshield can be repaired rather than replaced. Please have a look at the windshield and give me your opinion.”

- a) When you are ready, **record** your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to the glazier talking in **AUDIO 6**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

## Answer

**Answers will vary. Sample Answer AUDIO 6**

**“Since the damage is in the driver’s line of vision and larger than a coin, replacement of the windshield is recommended.”**

One way to get this answer...

1. Identify the problem: Customer wants a second opinion on repairing or replacing the windshield. The Glazier may give information that is different from the first shop and the customer may be unsure about what to do.
2. Determine the goal: Provide information so the customer can make a decision.
3. Decide on actions: Examine the damaged windshield and make a recommendation to the customer.
4. Set up solution: find information at [www.bestglass.com](http://www.bestglass.com).
  - Scan the list of questions on the website using the key words **windshield, repaired** and **replaced**.
  - Locate the underlined words: **Can my windshield be repaired or do I need to replace it?**
  - Decide that underlined words on a Web page are a link to more information and click on this link.

# Glaziers

- Locate the words ***Most 'dings' or 'chips' can be repaired if the damage is not in the driver's line of vision and is smaller than the size of a 50 cent piece, including any cracks... If the break is larger or in the drivers line of vision, most insurance companies recommend replacement.***
  - Decide that the windshield should be replaced because of the size and location of the break.
5. Solve the problem: Provide this information to the customer.

## Skill Focus

Oral Communication ②

Additional Skills: Finding Information ①, Computer Use ②,  
Document Use ②, Reading Text ②,  
Decision Making ①

## Task 2

Listen to **AUDIO 2**

“How long will it take to replace my windshield?”

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **AUDIO 7**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

## Answer

Answers will vary. Sample Answer **AUDIO 7**

“It will take an hour to an hour and a half.”

1. **Identify the problem:** Customer wants to know how long the repair will take.
2. **Determine the goal:** Provide information so the customer can make a decision.
3. **Decide on actions:** Search the webpage to find the information the customer needs
4. **Set up solution:** find information at [www.bestglass.com](http://www.bestglass.com).

One way to get this answer...

1. Scan the web page using the key words **long**, **replace** and **windshield**.
2. Locate the underlined words **How long will it take to replace my windshield?**
3. Decide that the underlined words on a web page are links to more information and click on this link.
4. Locate the words **Most vehicles, however, require about an hour to an hour and a half to properly install the windshield.**
5. Decide that this vehicle will require one hour to one and a half hours to install the windshield.

## Skill Focus

Oral Communication ①

Additional Skills: Finding Information ①, Computer Use ②,  
Document Use ②, Reading Text ①

## Task 3

Listen to **AUDIO 3**

"I need my car by noon today. It is 9:00 a.m. now. Is there any way I can have it back and safely drive it by then? Can you explain how this can be done?"

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **AUDIO 8**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

## Answer

Answers will vary. Sample Answer **AUDIO 8**

**"We can use a chemically cured urethane that dries in 1 hour. Your vehicle should be ready by 11:30 with the hour and a half installation time plus the drying time for the urethane."**

## One way to get this answer...

1. Identify the problem: Customer needs the work completed by 12:00 (noon).
2. Determine the goal: Figure out how the work can be completed by 12:00 (noon).
3. Decide on actions: find more information about time factors.
4. Set up solutions: find information at [www.bestglass.com](http://www.bestglass.com).
  - Scan the website pages using the key words **safely drive**.
  - Locate the underlined words **How soon can I drive my car after my glass is replaced?**
  - Decide that the underlined words on a web page will lead to more information and click on this link.
  - Locate the words ***This time frame can range from 3 hours up to 24 hours before your vehicle will meet Federal Motor Vehicle Safety Standards and is considered safe to drive. If you need to drive your vehicle sooner, a chemically cured urethane can be used that will allow a 1 hour drive-away time.***
  - Decide that the drying time can be reduced to 1 hour by using a chemically cured urethane.
  - Set up the formula to calculate the safe driving time:
    - Drop off at 9:00 a.m. + installation time of 1 hour and a half + 1 hour drying time = 9.00 + 1.30 + 1 = 11.30.

# Glaziers

- Decide that 11:30 is before 12:00 noon and that the customer can pick up the vehicle by noon.
5. Solve the problem: explain to the customer that the choice of a chemically cured urethane will ensure a safe drive-away time at noon.

## Skill Focus

Oral Communication ②, Finding Information ①

Additional Skills: Computer Use ②, Document Use ②,  
Reading Text ②, Decision Making ①,  
Scheduling or Budgeting and Accounting ①



## Task 4

Listen to **Audio 4**

“My Insurance Company recommends OEM glass for windshield replacement. What is OEM glass and why is it important?”

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **Audio 9**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

## Answer

**Answers will vary. Sample Answer Audio 9**

**“OEM glass stands for Original Equipment Manufacture. It meets the manufacturer specifications for safety and quality. Only OEM glass can ensure proper fit and finish which reduces the possibility of air or water leaks.**

One way to get this answer...

1. Scan the Web page using the key words ***OEM glass***.
2. Locate the underlined words: ***What is OEM glass?***
3. Recognize that underlined words on a web page are links to more information and click on this link.
4. Locate ***OEM stands for Original Equipment Manufacture***.
5. Decide that this answers the customer’s question: ***What is OEM glass?***
6. Locate the words ***...meets the manufacturer specifications for safety and quality***.
7. Decide that this information, and the information that follows answers the customer’s question: ***why is it important?***
8. Inform the customer.

## Skill Focus

Oral Communication ②, Finding Information ①

Additional Skills: Computer Use ②, Document Use ②, Reading Text ②

## Task 5

Listen to **AUDIO 5**

“How do you ensure proper installation?”

- a) When you are ready, record your response to the customer.
- b) Play it back and re-record if you would like to change it.
- c) When you are satisfied with your response, listen to **AUDIO 10**.
- d) Compare the two audio clips.
- e) If you see ways in which yours can be improved, record it again.

## Answer

**Answers will vary. Sample Answer AUDIO 10**

**“We do a factory recommended full cutout instead of the quicker short-cut method. We clean and prime the windshield before installation and use suction cups or disposable gloves to make sure the adhesive surface of the glass does not become contaminated.”**

## One way to get this answer...

1. Scan the website pages using the key words *proper installation*.
2. Locate the underlined words *What should I look for when my windshield is replaced.*
3. Recognize that underlined words on website pages are links to more information.
4. Decide that these words are a response to the customer’s question.
5. Click on the link *What should I look for when my windshield is replaced.*
6. Locate the information beginning with the words, *make sure that he’ll do a factory recommended full cutout instead of the quicker short-cut method...*
7. Decide that this information provides the information the customer has requested.

## Skill Focus

Oral Communication ②, Finding Information ①

Additional Skills: Computer Use ②, Document Use ②, Reading Text ②