

# GLAZIERS, ARCHITECTURAL METAL AND GLASS WORKERS

## Minimum Industry Training Criteria

O-Net Code 47-2121.00

### Length OF Training

The term of apprenticeship for GLAZIER shall be for four (4) years/seven thousand five hundred (7500) hours. The first seven hundred fifty (750) hours, extending over not more than six (6) months, shall be a probationary period.

### Related and Supplemental (classroom) Instruction

Apprentices shall satisfactorily complete prescribed courses of Related and Supplemental Instruction (RSI), which will be 160 hours per year for 3 years. The total of classroom hours required is 480. This instruction must include at a minimum the related and supplemental training processes listed in Appendix 'A'.

### On-The-Job Training (OJT) Work Processes

General Cutting (Glass)	250 Hours
General Cutting and Replacements	1,750 Hours
Mirrors and Specialties	250 Hours
Miscellaneous and General Shop	750 Hours
Fabrication of Store Front Metal	1,750 Hours
Setting of Store Front, Window Wall and Curtain Wall Systems	1,750 Hours
Doors and Door Hardware	250 Hours
Caulking, weatherization, Insulation, & Green Practices	500 Hours
Layout	250 Hours
<b>Minimum on the job training (OJT) Hours</b>	<b>7,500 Hours</b>

### Competency Testing

All apprentices must pass a competency test prior to the time of their classification advancement to the next higher period. The test shall be based on all Related Supplemental Instruction and manipulative skills tests based on laboratory assignments.

### Program Completion Percentages

Program Sponsors must have a 40% graduation rate of all apprentices that satisfactorily complete the first year of the program.

### Review and Revision Procedures

The Glaziers, Architectural Metal and Glass Workers Advisory Committee shall meet at the call of the chair or no less than once each three years to review and revise if necessary the Industry Training Criteria. This Glaziers, Architectural Metal and Glass Workers Training Criteria shall be in accordance with California Code of Regulations, Title 8, Section 212, in its entirety.

# GLAZIERS, ARCHITECTURAL METAL AND GLASS WORKERS

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### APPENDIX A

1. Hand Tools and Power Tools
2. Glass Handling and Cutting
3. Man Lifting Devices
4. Solvents and Hazardous Materials
5. First Aid/CPR/AED
6. Glass Replacement and Putty Glazing
7. Art (Stained) Glass
8. Labor History
9. Mathematics for the Glazing Trade
10. Aquariums-Shower Doors –Tube Enclosures-Showcases
11. Mirrors
12. Communication Skills
13. Layout Segmented Radius
14. Storefronts
15. Blueprints
16. Doors
17. Glazing
18. Aluminum Entrances
19. Curtainwall
20. Ribbon Wall Systems
21. Pressurewall
22. Skylights, Sloped Glazing
23. Spandrel, Architectural Panel System
24. Insulated and High Performance Glass
25. Safety Glazing Codes
26. Photovoltaic Glass
27. Insulated and High Performance Glass
28. OSHA 30
29. Solar Collectors and Skylights
30. Plastics
31. Foreman Training
32. Suspended Glazing
33. Welding Processes as per the AWS (American Welding Society)
34. AWS D1.1 Structural Welding Code-Steel

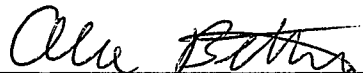
35. Describe sustainability and the social, environmental, and economic impact.
36. Identify the benefits of sustainability.
37. Explain the purpose of sustainability in commercial and residential buildings.
38. Identify professional "Green" organizations.
39. Identify elements of sustainability.
40. Explain the importance of green practices.
41. Define green bid specifications.
42. Identify and interpret a green specification in a project manual
43. Source and cost out green products.
44. Describe the elements involved with sustainable sites.
45. Describe water efficiency practices.
46. Determine energy and atmospheric requirements.
47. Identify and describe effective materials and resources.
48. Discuss indoor environmental quality standards.
49. Discuss the "Green" innovation and design process.
50. Identify and discuss the LEED-NC Process.
51. AWS D1.2 Structural Welding Code-Aluminum


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O NET: 47-2121.00

	Signatory		NonSignatory
	Labor	Management	
Name	Alex Beltran	John Kuser	No programs in this area
Organization	Nor Cal DC 16 Glaziers Training	NCPFC	
Street	3393 Arden Road	5677 Horton Street	
City, State Zip	Hayward, CA 94545	Emeryville, CA 94608	
Phone	510-785-8467	510-428-9486	
Name	Tim Davis	Skip Weltz	
Organization	Nor Cal DC 16 Glaziers Training	Walters and Wolf Glass, Inc.	
Street	3393 Arden Road	41450 Boscell Road	
City, State Zip	Hayward, CA 94545	Fremont, CA 945838	
Phone	510-785-8467	510-490-1115	
Name	Ed Garcia	Jim Maggiore	
Organization	DC36 Glaziers Training (LA)	Royal Glass, Inc.	
Street	Markon Drive	3200 De La Cruz Blvd	
City, State Zip	Garden Grove, CA 92841	Santa Clara, CA 95054	
Phone	714-894-4094 ext 14	408-969-0444	
Name	Luis Sobering	Steve Stewart	
Organization	DC36 Glaziers Training San Diego	Signature Glass Window	
Street		19 Quail Run Circle	
City, State Zip		Salinas, CA 93907	
Phone		831-754-8855	

  
 Alex Beltran  
 Chairman

  
 John Kuser  
 Co-Chair