

TRAINING PROGRAM FOR PLUMBING NCII

Duration 10 Days
Prerequisite at least High School Graduate

Course Overview

The PLUMBING training program is designed to create an appreciation of the industry practices and to develop entry-level skills within the PLUMBING construction trade. The program is parallel to TESDA training regulation wherein the trainees will be required to take the assessment after the training of Plumbing NC II.

Course Description

An industry like training that focuses on the application of plumbing technology. It includes safety practices, plumbing code, proper use of hand tools and maintenance, plumbing math, mensuration, blueprint reading, pipe joining techniques, installation of water and sanitary piping, and installation and repairing of fixtures.

Course Objectives

At the end of the training, the trainees will be able to:

- Demonstrate safety practices in construction trade.
- Apply proper use and care of plumbing tools as per industry practices.
- Develop knowledge and skills in sanitary and water piping system in compliance with the National Plumbing Code.
- Acquire skills in installation procedures and repairing techniques of fixtures.
- Obtain National Certificate level II from TESDA.

DAY 1: Orientation / Introduction to Plumbing and Safety Practices

Topics:

- Introduction to Plumbing / Legal Issues (National Plumbing Code)
- Personal Protective Equipment
- Hand Tools
- Pipes and Fittings
- Potential Work Area Safety Risks
- 5'S (sort, systematize, sanitize, standardize, self-discipline)
- Emergency Evacuation / Mobilization Plan

DAY 2: Trade Math, Mensuration, and Blueprint Reading

Topics:

- Basic Trade Mathematics
- Pull Push Rule Reading
- Plumbing Signs and Symbols
- Application of Signs & Symbols
- Reading Water Distribution Layout
- Reading Storm and Sanitary Layout

DAY 3: Preparing Plumbing Layout

Topics:

- Isometric Diagram
- Septic Tank
- Plumbing Details
- Water Filter System
- Drawing Water Distribution Layout
- Drawing Storm and Sanitary Layout

DAY 4 & 5: Pipe Joining Techniques

Topics:

- Pipe Threading and Joining
- PE Joining
- PVC Joining
- PPR Fusing
- CIP Caulking

DAY 6 & 7: Piping Installation for Water Distribution

Topics:

- Blueprint Reading
- Preparation and Material Identification
- Water Piping Installation

DAY 8 & 9: Piping Installation for Sanitary

Topics:

- Pipe Laying and Ventilation Principles
- Blueprint Reading
- Preparation and Material Identification
- Sanitary Piping Installation

DAY 10: Installation and Repair of Fixtures / Mock Assessment

Topics:

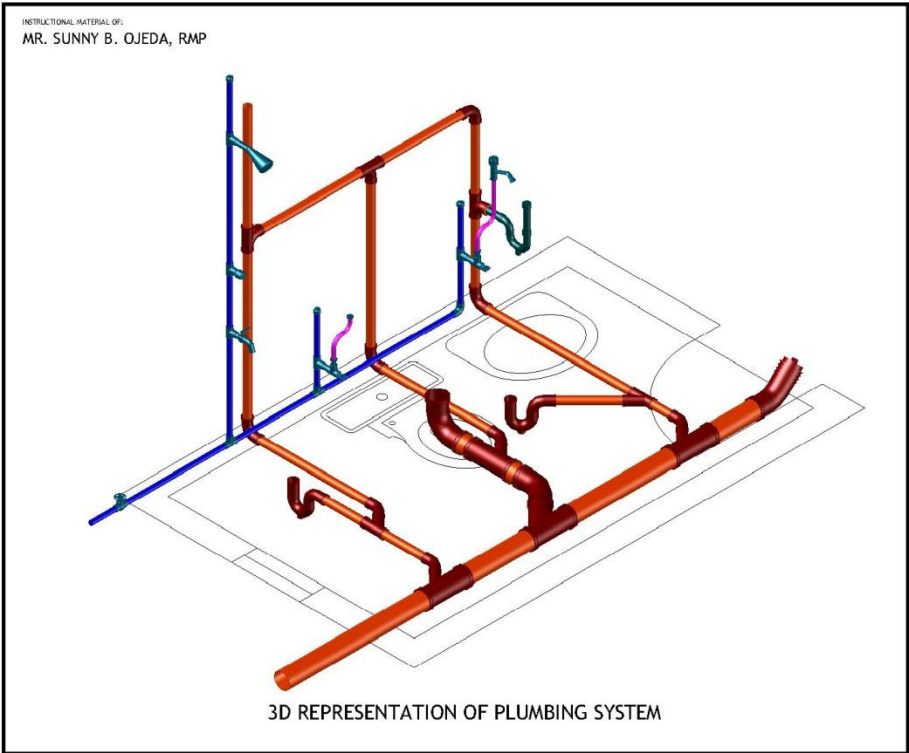
- Reading Installation Details / Exploded Assembly Drawing
 - Water Closet
 - Lavatory
 - Kitchen Sink
 - Urinal
- Mock Assessment

DAY 11: NCII Assessment Day

Prepared by:

MR. SUNNY B. OJEDA, RMP

BILL OF MATERIALS FOR PLUMBING NC II



No.	Tools & Materials	Quantity	Unit Cost	Cost
1	2x4 Wye Neltex	20 pcs		
2	4x4 Wye Neltex	20 pcs		
3	2x2 Wye Neltex	20 pcs		
4	1/8 Bend 4" Ø Neltex	20 pcs		
5	Clean Out 4" Ø Neltex	20 pcs		
6	1/4 Bend / 45º Sanitary Elbow 2" Ø Neltex	20 pcs		
7	Sanitary Tee 2" Ø Neltex	20 pcs		
8	1/8 Bend / 45º Sanitary Elbow 2" Ø Neltex	20 pcs		
9	1/4 Bend / 90º Sanitary Elbow 4" Ø Neltex	20 pcs		
10	PVC Orange Pipe 2" Ø Neltex (for sanitary)	40 pcs		
11	PVC Orange Pipe 4" Ø Neltex (for sanitary)	40 pcs		
12	Lavatory P-trap 1 ¼"	10 pcs		
13	Flexible P-trap 1 ½"	10 pcs		
14	P-trap 2" Ø Neltex	20 pcs		
15	Gate Valve 1/2" Ø Brass	10 pcs		
16	Shower Head	10 pcs		
17	Shower Valve	10 pcs		
18	Faucet (long)	10 pcs		
19	Lavatory Faucet	10 pcs		
20	Angle Valve 3/8" x 1/2"	20 pcs		
21	Cap 1/2" Ø (PVC)	20 pcs		
22	Male Adapter 1/2" Ø (PVC)	20 pcs		
23	Female Adapter 1/2" Ø (PVC)	20 pcs		
24	Tee 1/2" Ø without tread (PVC)	20 pcs		
25	Tee 1/2" Ø with 1 tread (PVC)	40 pcs		
26	Flexible Hose 3/8" x 1/2"	20 pcs		
27	Elbow 1/2" Ø (PVC)	10 pcs		
28	Teflon 3/4"	20 pcs		
29	Neltex PVC Solvent	20 cans /100cc		
30	Steel Brush 1"	10 pcs		

31	1/2" Ø PVC Blue Pipe (for water)	20 pcs		
32	1/2" Ø GI Pipe (for water)	20 pcs		
33	Cap 1/2" Ø (GI)	20 pcs		
34	Tee 1/2" Ø (GI)	20 pcs		
35	Elbow 1/2" Ø (GI)	20 pcs		
36	Pipe Threader (Rigid) for ½ and ¾ for galvanized iron / G.I. pipe	2 sets		
37	Pipe or Tube Cutter (Rigid)	2 sets		
38	Pipe Wrench 10"	10 pcs		
39	Pipe Wrench 14"	10 pcs		
40	Adjustable Wrench	10 pcs		
41	Vice Grip	10 pcs		
42	Hack Saw (Lagareng Pangbakal)	10 pcs		
43	Try-square	8 pcs		
44	Basin Wrench	8 pcs		
45	Plumb Bob	4 pcs		
46	Pull Push Rule (Metro)	8 pcs		
47	Electric Drill (Hammer/Reversible)	2 pcs		
48	Spirit Level	2 pcs		
49	Crow Bar (Kabra)	1 pc		
50	Claw Hammer (Martilyo)	2 pcs		
51	Sledge Hammer (Maso)	1 pcs		
52	Paint Brush 1"	10 pcs		
53	Plumber Snake/Hose	20 meters		
54	Water Pump Plier	8 pcs		
55	Plier (Standard)	8 pcs		
56	Long Nose Plier	8 pcs		
57	Reversible Screw Driver (±)	8 pcs		
58	Water Closet	2 sets		
59	Lavatory	2 sets		
60	Urinal	2 sets		
61	Kitchen Sink (stainless)	2 sets		
62	Hose Bib	10 pcs		
63	Faucet	10 pcs		
66	Tankless Water Heater 3.5KW	4 sets		
67	½" Ø Polypropylene Random (PPR) Moldex Pipe	10 pcs		
68	Assorted PPR Fittings (tee, elbow, coupling, plug, adapter, gate valve)	50 pcs		
69	PPR Fusion Machine for ½ and ¾	2 sets		
70	½" Ø Polyetelene (PE) Pipe	1 roll (at least 20mts)		
71	Assorted PE Fittings (tee, elbow, coupling, plug, adapter, gate valve)	50 pcs		
72	Pressure Gauge 300 psi	4 pcs		
73	Hacksaw Spare Blades	20 pcs		
74	40" or bigger LED TV Monitor	1 set		
75	Safety Goggles	25 pcs		
76	Construction Helmet (White)	25 pcs		
77	Gloves with Rubber Grip	25 pcs		
Total Cost				
Prepared by:		MR. SUNNY B. OJEDA, RMP		
San Jose Del Monte Nat’l Trade School – CSJDM, Bulacan				

