

# SAFETY ALERT

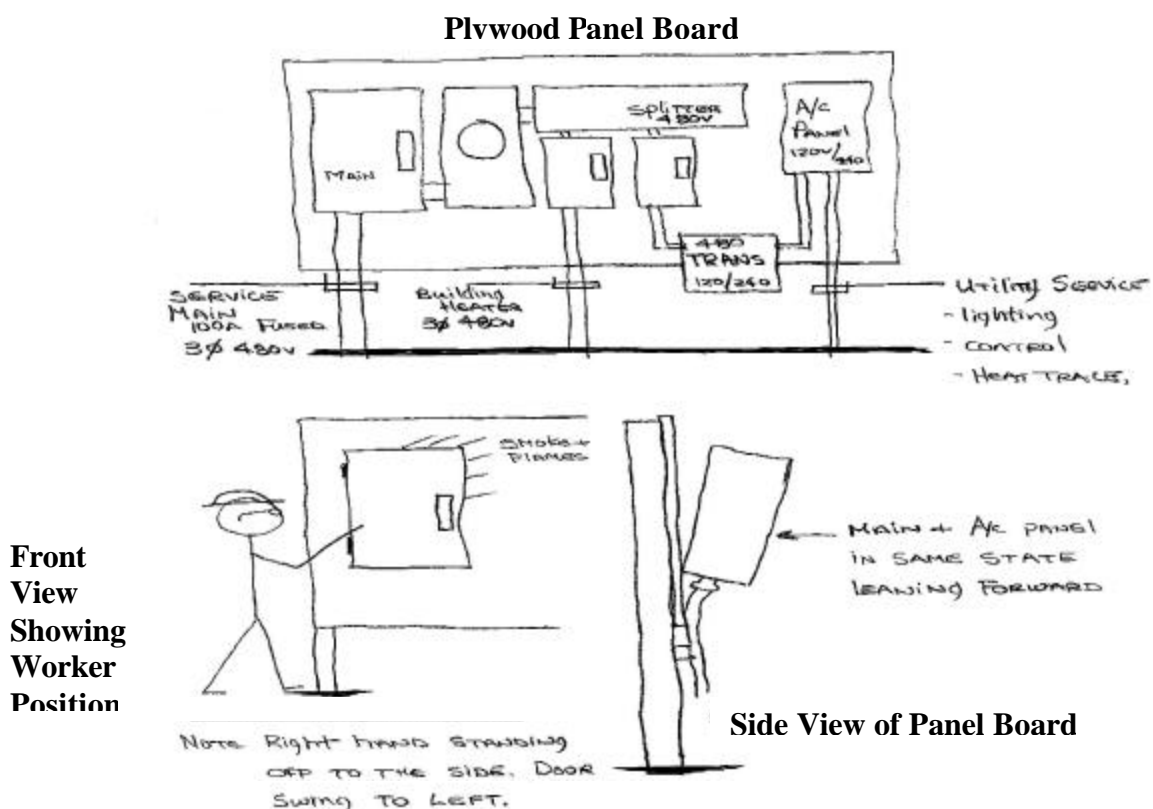
November 2006

A very experienced journeyman electrician was called out to site to install a sub panel for GFI breakers for site heat tracing.

As he approached the weathered plywood panel board supporting the existing site service and various electrical components, he noticed the top of the main disconnect & A/C panels were both tipping away from the board, indicating the internal top mounting screws had pulled out.

He realized he would have to properly bolt the panels securely through the plywood to correct the problem and to do that the system would have to be de-energized to allow safe access into the enclosures.

He positioned himself off to the right of the main service enclosure & as he reached across to close the disconnect the system suddenly shorted out resulting in a loud spontaneous arc flash. Fortunately he was not injured in any way and was able to contact the operator and utility company for assistance. On investigation, it was noted that two of the three mounting screws in the main disconnect had previously fallen to the bottom of the enclosure apparently without incident. The middle screw and washer however had fallen onto the line side of the breaker resulting in a direct short to ground. There was a considerable amount of equipment damage.



## REVIEW / RECOMMENDATIONS:

Workers are reminded to...

1. always be alert for “unexpected hazards” and take appropriate actions to mitigate possible risks.
2. consider the possible direction of any possible release of energy and stay out of the “Line of Fire”.
3. use the best trade practices possible at all times. The practice of simply screwing an electrical enclosure onto a plywood back board is NOT recommended. As evident here, over time screws can loosen and pull out, leading to very dangerous situations. Bolting through backing boards is the preferred method of installation.

*(Please post in a conspicuous location in area office or on site)*

