

Courses conducted by Approved Training & Testing Centre (ATTC) approved by BCA – Practical steps

COURSES DESCRIPTION	
<b>Doors and Window installation (aluminum)</b>	
Step 1	Before installation of doors and windows, the installer must check the level and reference line.
Step 2	After the setting out has been confirmed by the installer, installer will start to install the outer frame according to the drawing.
Step 3	Check the sequences of the frame by measuring the length of the two diagonals and ensure that the difference between the two diagonals is outer frame is not more than 4mm
Step 4	After the outer frame has been confirmed the installer will start to install the inner frame according to the marking drawing
Step 5	Final, the installers need to check and confirm all the installation works are correctly positioned.
<b>Glazing</b>	
Step 1	Check the dimension for each opening frame in order to cut out the glass by using glass cutter and circular cutting for more accurate measurement.
Step 2	Break the glass and mark the glass dimensions for circular and arc shape respectively. Use the glass cutter and circular cutter to finish up according to drawing
Step 3	Ensure when installing the glass to each individual frame; insert the following items such as gasket or setting block to prevent glass-to-metal contact. However the joint surface must be clean, dry and lust free.
Step 4	Use the cleaning solvent to clean up before sticking masking tape to keep excess sealant from contacting adjacent areas. As well as the backer rod for balancing the glass before applying glazing silicon.
Step 5	Install top and bottom hinge for shower door screen, top pivot handle. Install top and bottom patch fitting for swing door and top pivot handle.
Step 6	Finally, the installer need to check and confirm that all the installation works are correctly positioned.
<b>Curtainwall installation</b>	
Step 1	Before installation of curtain-wall, the installer should familiarize themselves with building floor or elevation layout plan as well as quantity, setting out and type of brackets to secure.
Step 2	First the installer will start with the site survey using theodolite and measuring tape to counter check with reference line and angle provided by main contractor.
Step 3	After the setting out has been confirmed, the installer will start the drilling for the anchor bolts and continues with the brackets installation. The anchor bolt pull out test must be conducted before the mullions and transoms were installed.
Step 4	The installer will distribute the materials (mullions and transoms) to respective floors in accordance with the floor and quantity requirements.
Step 5	The installer will then place the mullion and transoms onto the external wall and secure the mullion and transom in position according to the requirements based on the confirmed datum line (vertical and horizontal reference lines marked on the wall or on the floor).
Step 6	Finally, the installer need to check and confirm that all the installation works are correctly positioned and install the fire stop installation before the glass panels are installed.
<b>Cladding</b>	
Step 1	Counter check with the reference line x-y grid and reference level provided for any discrepancy. If the chesetting out lines is in order, drill to install the anchor bolts and brackets.
Step 2	Next install the aluminum vertical mullions and secure the aluminum mullions in position according to the requirements.
Step 3	Check again, that the mullions are in the correct position before tightening of the bolts. The anchor bolt pull out test will be conducted before installing the aluminum cladding.
Step 4	On receiving the aluminum cladding materials on site, the installer would distribute the materials to the respective elevation according to the types for each floor and quantity requirements.
Step 5	Place or hook the aluminum cladding from bottom up on the external wall according to the panel numbering as shown on the shop drawings.
Step 6	The external surface of metal cladding should be protected with a protection tape or PVC plastic sheet.
Step 7	Evenness and vertical alignment of cladding systems should be checked by using plumb line for every floor before processing to the next level.