

Christ the King – Pew Project
Standard Operating Procedure
Revision 2. 5 September 2023 Revision 2
Revision 1. 11 July 2023 – Revision 1
Original dated
April 1, 2023

This Standard Operating Procedure (SOP) provides the necessary procedures for refinishing the pews at Christ the King Church located in Missoula, MT.

Christ the King Parish has partnered with the Knights of Columbus Council No. 13022 to manage this project and purchase the necessary equipment. The CTK – Knight partnership envision that the labor hours should be provided by the CTK Parishioners. CTK and the Knights have agreed to split the initial equipment cost. During January 2023, the Men’s Journey also contributed significant funds to assist CTK with their expense. The contributions from the Knights and the Men’s Journey are appreciated and acknowledged.

This SOP provides the necessary requirements for Sanding with 80, 100, and Grit sandpapers. Future requirements will be added in a revised future SOP, as needed. It should be noted that the original SOP listed disassembly of each kneeler Pew for refining place which is no longer necessary as all work can be performed with each kneeler in-place.

This SOP identifies needed equipment, safety precautions, and the planned approach to complete the Project without disruption of the Mass schedule.

Mass will be possible during the CTK Pew Project, and work should be halted at least 30 -45 minutes before Mass to allow cleaning of pews and storage of equipment before Mass.

Vision

The Project Vision is to perform all required Pew Refinishing by the Parishioners of Christ the King for their enjoyment and benefit of the completed Pews. The Pew Project is a big project requiring considerable work hours and expertise that will provide pride and community bonding for Christ the King Parishioners

CTK Pew Teams

The CTK Pew project will be performed using volunteers based on their experience and interest. The pews will be sanded with 80, 100, and 120 grit sandpaper. The dedicated volunteers will be working on five pews at a time for completion before moving to the next set of pews. Additional work and training will be provided for the application of pew finish.

Labor for the CTK Pew Project will be provided using a three-person team. Two for sanding the pews with the third to relieve the sanders or to sand out back, as needed. Note: Only a single person, or a two-person team for sanding has been used at the time of this SOP revision. A third person would be helpful to relieve one of the people operating the sanders on as shoulder fatigue is noticeable during sanding.

Safety

The safety of all people involved is highly important and the CTK Pew Project will not be considered a success if any personal injury occurs. Please follow all safety precautions and use the recommended safety gear in this SOP.

Remember, Safety First. Nothing is more important than your safety.

Dust masks are recommended even with the vacuum system attached with Festool Sander. Hearing protection is also recommended for sanding operations. Dust masks and ear protection are also located in the Job Box.

Sign in Sheet

A volunteer sign in sheet located in the Container Box is required prior to working to document each volunteer, work progression, and work status transition between work teams. The sign-in sheet will be used by all work teams for everyone's understanding of what has been done and what future work is needed by the next work team.

Volunteer sign-in is important not only to communicate work performed but to also keep track of the volunteer sessions for each CTK Group for a project completion celebration dinner to the CTK Group with the most volunteer sessions lasting at least one hour. Sign-in for each volunteer session is needed to communicate work performed and to document the total sessions of each CTK Group. As described above the CTK Pew Project Management Plan a celebration pizza dinner is going to be awarded to the group with the most volunteer sessions lasting over one hour at the end of the project.

Training

Training is required for all project volunteers to ensure sufficient skill level for completion of a safe, and visual appealing Pews. A second volunteer training was held on 13 July 2023 following an initial training on 1 April 2023 by Nate Jangraw and Leif Griffin. Two addition pew trainings will be held at CTK on [September 23 at 10:00 am and on September 25 at 5:30 pm](#). Additional individual training is available, upon request to Leif Griffin or Nathan Jangraw. Records of safety and project training will be maintained in the CTK Administration office in the CTK Pew Project file.

Two Festool sanders and a dust extractor will be used to sand the pews. Finishing procedures using varnish and stains will be added in the future. Volunteer training will be provided for volunteer safe use of the equipment and to achieve the desired Pew finish. Examples of the desired finished Pews can be seen in the Church sanctuary.

Equipment and Storage

The Festool sanders, sandpaper, air filtration system and hose are secured in a Job Box in the Former Child Day Care located in the basement adjacent to the elevator and the Men's Rest Room. Access to the Job Box key can be found in a magnetic box hidden directly beneath the lock attached to the box bottom. Locate the magnetic key box and open the lock on the Job Box to access the necessary sanding equipment. Return the key and the magnetic box after each use.

CTK desires to maintain a log of equipment use, so please complete the CTK Pew Sign in Sheet for each sanding session to document work completed for the next sander and to document each sanding session by CTK group. This log will be used to verify the group winning a pizza dinner with the most volunteer sessions lasting over one hour at the end of the project.

Pew Refurbishing Procedure

Initial Sanding

I. Access Sanding Equipment

Please sign the CTK Pew Project Sign in sheet at the Job Box located in the old Child Day Care in the basement. Anyone working on the pews and using the sander will sign in on the sheet.

After opening the Job Box and loading the sanding equipment onto the metal cart located adjacent to the Job Box, wheel the cart to the elevator for transit to the Sanctuary. Push the button calling for the elevator and wait for the elevator door to open.

After the elevator door opens, wheel the metal cart into the elevator and shut the door. Follow the instructions on the elevator counsel and turn the metal key to the right. Push the up arrow to transport the elevator up one floor to the Sanctuary floor. Return the key to the neutral position, open the elevator door by pushing the counsel button, wheel the metal cart into the Sanctuary and set up the sanding and air filtration system in accordance with the CTK Pew Training. Reverse the above procedure for returning the sanding equipment to the Job Box at completion of the sanding session.

II. Pew Identification

Pews will be identified on the log sheet by Section and Row. The five pew sections will be identified starting with Section 1 to the far left facing the Altar followed with consecutive sections 2 through 5. The middle section will be Section 3.

Rows will be identified starting with Row 1 nearest the Altar with an increasing row number from the Altar in each Row Section.

III. Sanding

Sanding Preparation – Research and Development

- Considerable sanding was performed in the research and development (R&D) effort to develop and better understand the best use of the Festool equipment for application in the CTK Pew Project. The following information was learned during this R&D effort.
- Kneelers are not to be removed but will be refinished in place. The initial SOP had removal of the kneelers, but a strategy was developed during the R&D effort to finish them in-place, which will be instructed in a further SOP revision.
- Two Festool Sanders will be used together with the dust extraction system to sand the pews. These Festool Sanders are models 150/5 EQ-PLUS and ROTEX RO-100.
- The ROTEX RO 150 has three tools capable of coarse sanding, fine sanding, and polishing. Coarse sanding is not recommended on CTK Pews because of possible wood damage to the Pew.
- Both sanders should be operated with soft foam sanding discs to prevent possible sanding gauges to the Pew.

- The plywood has thin plies that can be worn through with aggressive sanding possible by pushing against the sander. Do not use excess force pushing on the Sanders while sanding but apply a constant pressure on the sander preventing the sander to tip onto an edge causing the sander to dish out the wood by removing the wood and not the finish. Soft foam pads will be used on each sander to prevent wood gauging with the sander.
- The sandpaper should be placed directly on the soft foam pad by aligning the ventilation holes on the sandpaper and the soft foam pad.
- The two sanders using separate air hoses can be used at the same time using a Y connector plugged into the filtration system. Both hoses should be hooked to the Y connector with the possibility of closing off one side of the Y connector for use of a single sander. Special electrical considerations are needed though when using both Festool Sanders and the air filtration system.
- One electrical circuit using a 12-gauge electrical cord can be used for the air filtration system and one Festool Sander. The second sander must be plugged into a separate electrical circuit different from the one used for the first sander and air filtration system. The two electrical outlets to be used during sanding operations will be identified in the Sanctuary and reviewed during the training session.
- After completing each sanding finishing the sanding session, vacuum the pew with the Festool Sander using the vacuum attachment attached to the filtration system. Then, finally wipe the pew with a damp painter's rag to clean the sanded pews. The painter's rags are also kept in the Job Box.

Sanding

- The sanding speed should be about 1 inch per second with each Festool sander.
- Sand the seat top, front, and side of each pew with 80-grit sandpaper until the old brown stain and film finish has been removed.
- Appendix A shows a photo of the appropriate amount of sanding to a Pew with 80 grit sandpaper.
- After completing the 80-grit sandpaper, mark the entire Pew surface with a pencil as an indicator for sanding completion with the next sandpaper.
- The 100-grit sandpaper will be used to sand the entire surface using the pencil marks as an indicator of completed sanding. Sand the pew using removal of the pencil mark with sanding as a guide to judge the extent of needed sanding with 100 grit paper.
- Sanding with the 120-grit sandpaper will be performed using the same pencil mark method as an indicator of sanding completion.
- Final Sanding Each Pew will be sanded a second time with 120-grit sandpaper to remove a light “wood wisping” outside the wood grain in some spots still present after initial sanding with 120 -grit sandpaper. Re-mark the pew again with a pencil mark before removing the mark and the “wood wispingness” with the sanding using the final sanding with 120-grit paper.

Appendix (B) shows a picture of the “wood wispingness” shown after the initial 120-grit paper that should be removed with the second sanding with 120-grit paper.

1. Pew legs

The Pew legs will only be painted and not sanded. The Pew Legs will be addressed in future revisions to this SOP.

2. Trim, Side Pieces, and Ends

The trim and side pieces should be removed from each Pew before commencing sanding and taken to a volunteer home and sanded away from the Church with guidance from Nathan. Volunteers will be shown during the Pew Training to remove the trim and side pieces with a rubber mallet and a chisel located in the Job Box.

Pew ends will be sanded by off-site volunteers using the 80 and 100 Grit sandpaper only in preparation for future router work to be directed and sanding arranged by Nathan Jangraw. **Don't sand the Pew end edges as it will be cut off with the router.**

Pew Finish

Addition of the pew finish is an important process with application expertise required for the desired final appearance. Nathan Jangraw will provide additional training for finishing the Pews. Please contact Nathan if you are interested in receiving this training for Pew Finishing.

Clean Up

As discussed above, after completing each pew sanding session each vacuum pew with the Festool Sander using the vacuum attachment attached to the filtration system. Then, finally wipe the pew with a damp painter's rag to clean the sanded pews. The painter's rags are also kept in the Job Box.

All Volunteers are expected to clean up all the project mess and return the sanding equipment and supplies to the Job Box located in the Old Child Care. The key for the lock box can be found in a magnetic box hidden directly beneath the lock found attached to the box bottom.

In preparation for the next Sanding team, the dust collector bags in the Festool Sander must be checked for possible replacement. If full, replace the bags with new bags found in the Job Box.

Contacts

Christ the King

- Nathan Jangraw - 406-239-9946
- Becca Cheff - 406-239-9946
- Shari Douglas – 406-728-3845
- Fr. Kirby Longo – 406-728-3845

Knights of Columbus Council No. 13022

- Leif Griffin – 406-396-8335
- Randy Biehl – 406-788-0743
- Gerry Heivilin -406-531-1295
- Doug Glevanik – 406-544-1386

Appendix (A)

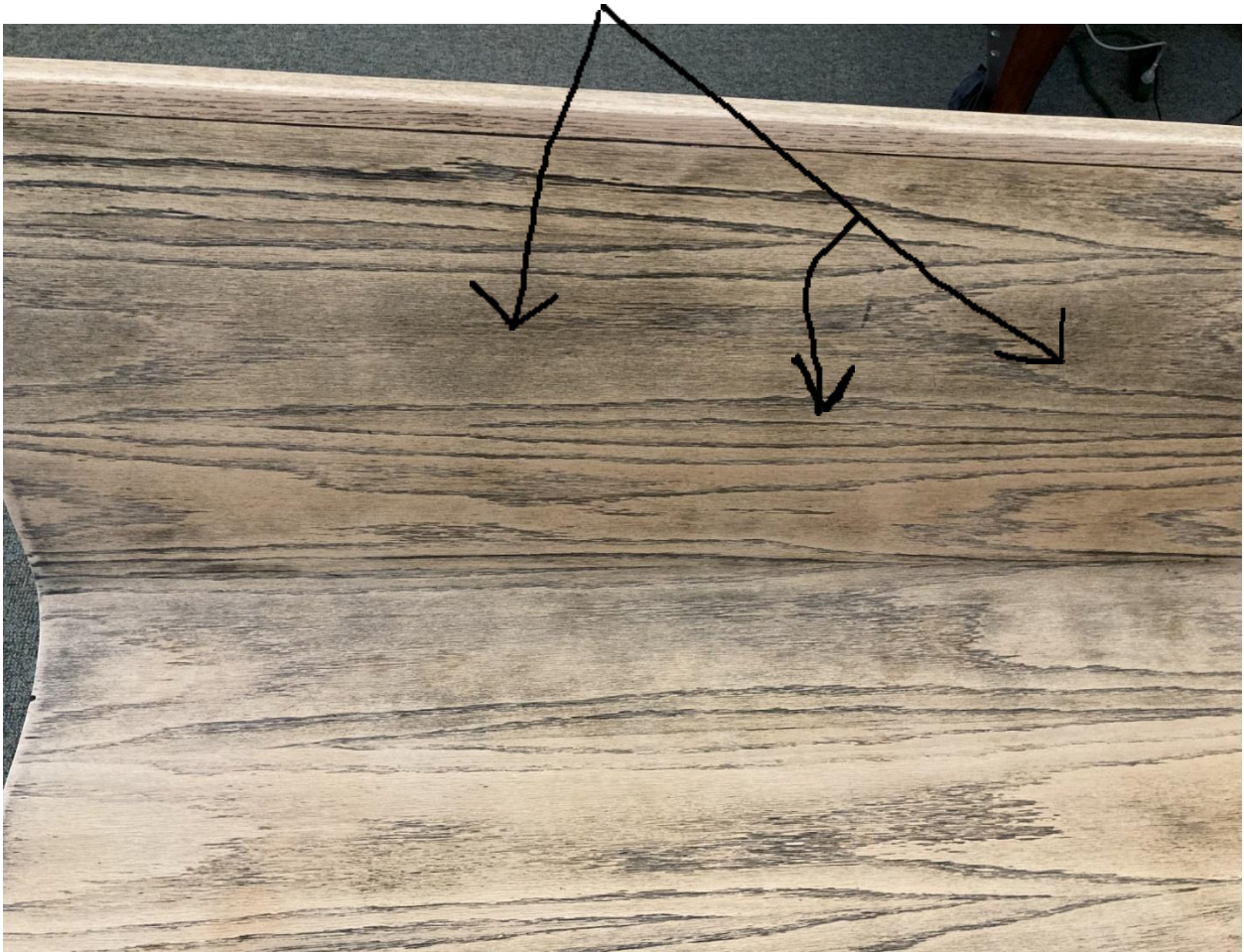
Pew Sanding with 80 Grit Paper



Appendix (B)

Wood Wispiness

Wood Wispiness



Remove Wood Wispiness with two pew sanding's using 120 Grit Sandpaper