

Appalachia Sauna

Installation & Owner's Manual



Read this entire manual through to the end before proceeding with the assembly.

Your Appalachia Sauna (called Keitele in Finnish) was manufactured in Europe and, as a result, includes an instruction manual that is presented in several languages with all measurements in metric. To simplify things for the American market we have developed this manual, which is presented in a very simple format using pictures and minimal descriptions. It is recommended that you use this manual, which includes the European parts list and layout diagrams at the back of the manual.

Assembly of the Appalachia Sauna requires a higher level of skill than our other sauna models. The skill level of a contractor or high-level "handyman" is suggested.

A review of the parts list at the back of the European manual in advance of assembly will be very helpful prior to assembly.

Please note the following comments and suggestions before you begin:

- You should assemble your sauna on a firm and level surface. If you assemble on a concrete slab then you can place the floor stringers directly on the concrete. If you are assembling on a dirt surface – as is shown in this manual – then you will need to provide additional support below the stringers. The following instructions will show the stringers placed on treated 2x4's that are supported by pavers.
- It is very important to KEEP THINGS SQUARE. Be sure the stringers and logs are square and check regularly as you work your way up the sauna. It will make things much easier along the way!
- A few of the components are provided for European installations and are not applicable. If they are not shown in this manual then they are not to be used. We have noted these parts in the parts list at the back of this manual.
- Using the included "tapping" board so as not to damage the grooves, tap each log into place with a 3lb hand sledge. You can tell if the log is firmly into the grooves of the lower board by viewing the ends of the logs. A very slight gap is normal and not necessary to correct, but you want to get the log as firmly into place as you can before screwing it into the lower log.
- We suggest you purchase 3" torque deck screws for the assembly and not use the included screws. Screw EVERY log into the next at the notch where the logs interlock.
- You may choose to use a nail gun to nail the roof, ceiling and floor boards in place. Doing so will save much time. If using a nail-gun you will not use the included nails.
- Since the unit is built of wood you can make modifications during or after the process. For example, if you do not want the porch rails you can simply cut them off. Additionally, interior trim pieces can be used as desired.
- The unit includes roofing shingles but no drip edge. If you desire drip edge or a different color shingle then you will need to purchase them at your local home center. Roofing felt is not included and is not necessary.
- You can leave the Nordic Spruce lumber natural or stain/paint the exterior. It will weather to a yellowish tint in the short term and over time will bleach out somewhat, which is fine. If you prefer your own color then you can stain or paint the exterior to your preferred color. Never stain or paint the inside of the sauna room itself.
- There may be slight design variations from the pictures in the manual. These will be aesthetic only and in no way will affect the function or performance of the sauna.

Recommended tools are as follows:

- | | |
|--|---|
| <input type="checkbox"/> Claw hammer | <input type="checkbox"/> Square |
| <input type="checkbox"/> 3lb Hand-held sledge hammer | <input type="checkbox"/> 25' tape measure |
| <input type="checkbox"/> Hand or circular saw | <input type="checkbox"/> Phillips head screw driver |
| <input type="checkbox"/> Jig saw | <input type="checkbox"/> Rubber mallet |
| <input type="checkbox"/> Cordless drill | <input type="checkbox"/> 6' Stepladder |
| <input type="checkbox"/> Level | <input type="checkbox"/> 8' Stepladder |

Optional helpful tools

- Table saw
- Finish nail gun
- Torque deck screws



APPALACHIA ASSEMBLY INSTRUCTIONS



1. Locate the eight foundation stringers (AR1). You can set these directly on a concrete slab or, if installing on bare ground, lay them onto treated 2x4 or 2x6 supports, which is what is shown in the picture. Space the stringers equal-distance apart so that the overall outside dimension is 3790mm. Note that the two center stringers will be side-by-side as in the picture. Ensure that the layout is square by measuring from corner to corner.



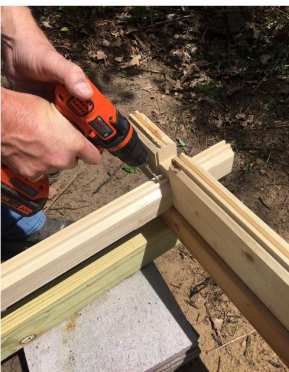
2. Find the two short foundation pieces (AR2) and nail them at the front, between the outside stringers and as shown. Next find the two logs that are half size (001) and lay them perpendicular to the eight stringers, one at the rear and the half-way point of the stringers. **DO NOT SCREW THESE INTO PLACE YET.**



3. Place two full logs (015) and place them on the two ends of the structure so that they rest directly over the outside foundation stringers and notch into the two half logs. Verify that everything is square.



4. Locate one of the scrap driver pieces and ensure a tight fit of the notched logs by hitting with a 3-lb hammer.



5. Screw the two half logs to the stringers using the included 70mm screws or 3" deck screws. Place your screw between the grooves in the log and drive flush with the surface so that the next log will nest correctly. Double-check square and then attach two full logs to two half logs with screws.





6. Place log (016) in place below the door to start the center wall. Then place shorter logs (021) and (010) in place on top of log (016) that will continue the center wall between the sauna room and changing room. Screw into place.



7. Place logs (009) and (010) on the front of the sauna.



8. Place two half-logs (012) at the left and right front of the sauna and screw directly to the short foundation piece referenced in step 2.



9. Place short logs (013) to form the front wall of the two porch walls.



10. Alternate long logs (017) with sauna and changing room side wall logs (016) to form the side walls of the sauna and the porch. Continue to work your way up all walls until you have completed six rows of the two side walls. Row seven will use two side logs (019) that are flat (no grooves) on the porch ends of the log.





11. At this stage insert the all-wood interior door between the sauna room and changing room. The doors should slide into place without being forced and will swing open into the changing room. Tap the door at the top to be sure it is sitting directly on the bottom log. Do not fasten the door with screws or nails; it is designed to sit in place with no further fastening.



12. Insert the entrance door with window in the same way as the interior door. It should slide into place in the same way as the interior door and will swing open to the outside porch. Do not fasten the door with screws or nails.



13. Confirm that the doors are level both vertically and horizontally.



14. At this point all walls, doors, and rails should be square, level and secure. Any minor adjustments can be made with wood shims. NOTE: Bowed logs can be straightened with the included straightening tool.



15. Continue to work your way up with the appropriate logs. After the tenth log is placed on the front of the sauna, begin using logs (010) and (011) to frame the window.





16. Insert the window after several rows are laid ensuring the window will swing to the outside. Do not screw or nail the window into place.



17. At this time, it is suggested you install the door and window hardware. Place the door latch so that the lock is to the exterior of the sauna.



18. Place the handles on the door latch and verify the door closes and locks securely.



19. Install the interior door knobs.



20. Continue to position logs so that the window and doors are framed with the logs. At row 16 on the two sides, use the longer logs (020) to begin the cantilever extension that will support the roof. (Review steps 20-26 before continuing to see how the cantilever extension logs alternate with the logs located on the front and rear walls).



21. The cantilever extension logs will be used only at the two side walls for now, not at the center.

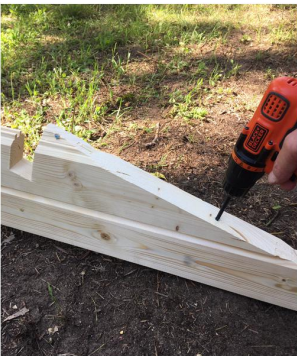


22. Place cantilever logs (021) and then top cantilever logs (022) and (026) on the two side walls to complete the cantilever extensions on the side walls. Note that (022) is tapered at the top for the right side wall and (026) is tapered for the left side wall. NOTE: Do not screw the cantilever logs to the all logs yet. This will be addressed in step 33.



(022) and (026) logs are tapered

23. While working your way up with the extension logs, locate the sections (W1-1) and (W2-1) which are the angled portions of the front and rear walls.



24. Disconnect the individual logs that form (W1-1) and (W2-1).



25. Alternate the front and rear wall individual pieces from (W1-1) and (W2-1) with the center wall logs as you work your way up.



26. Insert mid-point cantilever logs (PR1) in the notches of (W1-1) and (W2-1) as you work your way up the front and back wall.



27. View of front showing progress to this point.



28. At row 21 on the center wall, place cantilever log (020) and add (021) and (024) as shown as you work your way up. (Review steps 28-32 before continuing to see how the cantilever extension logs alternate with the logs located on the front and walls.)



29. View of front showing progress to this point.



30. Further disassemble (W1-1) and (W2-1) to separate peak log sections for front and rear walls.





31. Continue working your way up the front and rear walls with the angled pieces from (W1-1) and (W2-1), alternating with center wall cantilever logs.



32. Complete the center cantilever by adding the narrow cantilever log (025) to the center wall and on top of cantilever log (024). You will now be ready to begin the roof installation process.



33. Find two roof boards (RB2-1) and position them to the front edge of the cantilever logs. NOTE: place the "groove" edge facing out and flush with the edge of the cantilever logs. Nail them to the peak and furthest left and right cantilever logs. Before nailing the two roof boards to the remaining cantilever logs, ensure they will touch the cantilever logs without bowing. If there is a gap between the roof board and cantilever log, either shim the cantilever log or gently tap the cantilever log to remove the gap and then screw into the log walls. This is important as you do not want the roof to appear "bowed" when complete.



34. Once the cantilever logs are properly positioned and fixed to the wall logs, begin laying out the roof boards.



35. Tap each roof board into place with a mallet prior to nailing into the cantilever logs.





36. The final two rear roof boards will need to be cut length-wise (ripped) so that they are flush with the rear edge of the cantilever logs. (Use of a table saw is easiest, but you can also cut with a circular saw once the final board is installed using a chalk line to mark the edge of the cantilever log.)



37. Front view of sauna once roof is completed.



38. Find the left and right roof edge reinforcement boards (RE2-1) and install at edge of roof lines with nails or screws. Cut to length as needed.



39. Find the left and right eave edging boards (EaE5-1) and nail to the roof edge reinforcement boards as shown. Cut to length as needed.



40. Place the fascia boards (FaB7-1) on the roof edge and secure to the ends of the cantilever logs and roof board.





41. View of sauna after fascia boards attached.



42. Install the porch (terrace) boards (TB1-1) starting at the front and working your way back toward the sauna. Place the narrow porch board (TB1-2) at the front and between the front porch rails. Nail the porch boards to the foundation stringers. NOTE: If the porch boards do not reach far enough to cover the left and right stringers, you can nail a support piece into the stringers and nail into it.



43. View of completed porch.



44. Find the changing room floor boards (RB2-1) and nail them in place to the stringers. Use a mallet to tap these tongue and groove boards into place. The final board may have to be ripped on a table saw to provide the correct fit. Trim will be used later to cover the edge, so a small gap is ok. Also, if the floor boards don't reach to the foundation stringers you can create and install a filler piece using purchased lumber.



45. Install the floor boards in the sauna room (FB5-1) by nailing to the stringers. NOTE: Leave a 1/16" +/- gap between the floor boards in the sauna room to allow the room to draw fresh air and to let any water flow out of the floor.





Tapered ceiling support

46. The sauna room and changing roof will have a ceiling below the roof to create an air space. Find four ceiling supports that extend the length of the two rooms and have a taper on them. Nail to the side and center walls in each room, positioning so that the ceiling boards will nail to these as well as the cantilever logs on the inside of the rooms.

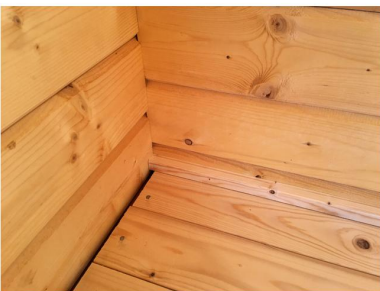


47. Install the tongue and groove ceiling boards (CB1-1) to the ceiling supports and cantilever logs. You may have to rip the final boards on a table saw for best fit. It is ok to leave a small gap at the wall since trim will be used to cover the edges.



Ceiling strip

48. Install ceiling strips (CeS1-1) at the point where the ceiling boards meet the interior walls. You may choose to only use the trim on the side and center walls rather than the front and back walls of the sauna. The purpose of the trim is only to cover the gap for aesthetic purposes, so it is fine if you decide not to use them.



49. Install the floor trim (FIB2-1) around each room at the point where the floor meets the walls. Cut the trim to fit as needed. Again, these trim pieces are for aesthetic purposes, so it is fine to use some, none or all.

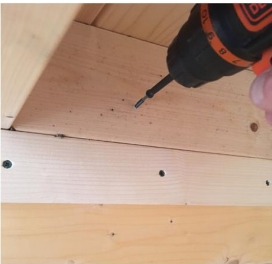


50. In the sauna room, install the upper bench supports (SP2) 780mm above the floor so the end butts against the side wall. Install the lower bench support (SP3) 330mm above the floor so the end of the boards align with the front edge of the upper bench support.





51. Screw the bench supports into front and rear room walls with 70mm screws ensuring the supports are level.



52. Install the top and lower benches, securing to the walls with 70mm screws.



53. View of installed benches.

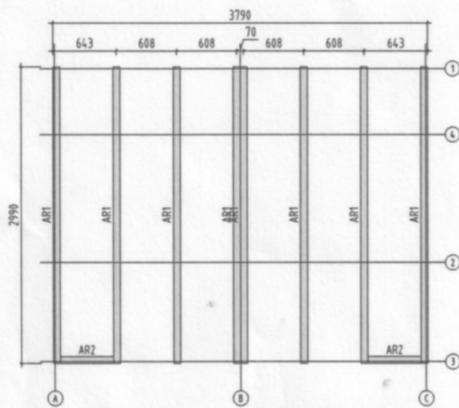
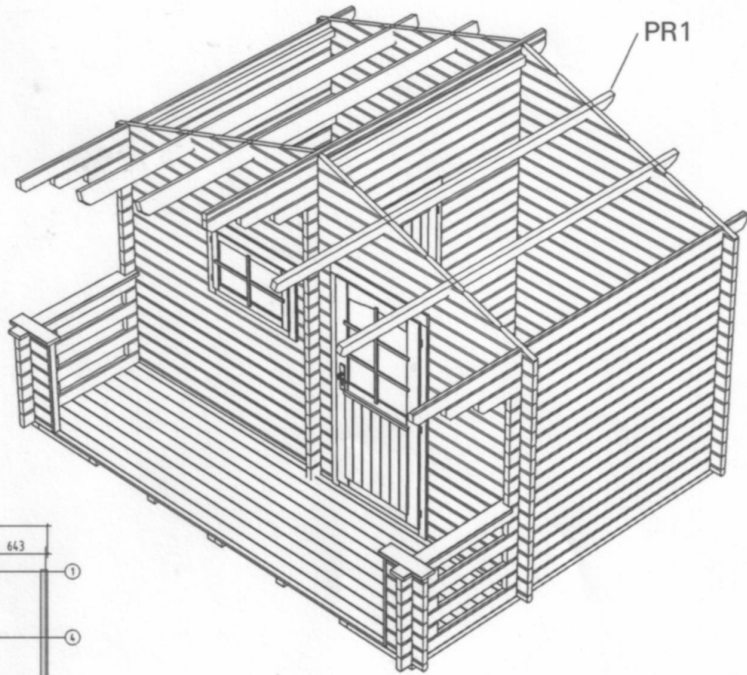


54. View of completed sauna room.

Your sauna is now ready for roofing. The sauna includes shingles but does not include drip edge. Purchase the appropriate colored drip edge at your local home center as well as shingles if you desire a different color than the included black shingles. NOTE: If using a wood-burning stove you should first install the stove and chimney before roofing the sauna. Follow the heater installation instructions included with your heater for the appropriate electric or wood-burning unit.

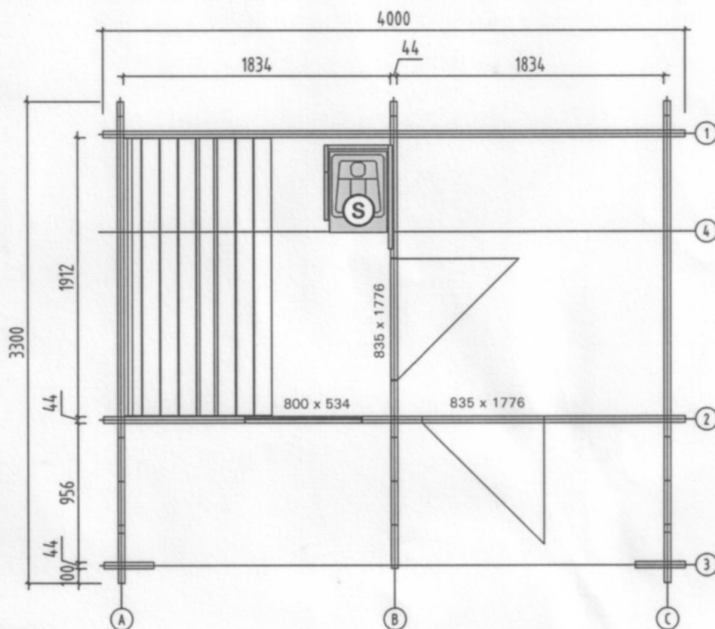


KEITELE



Floor plan with wall symbols
 Grundriss mit Wandsymbolen
 Grundplan med väggsymbol
 План пола с обозначениями стен
 Plan du sol avec symboles des parois

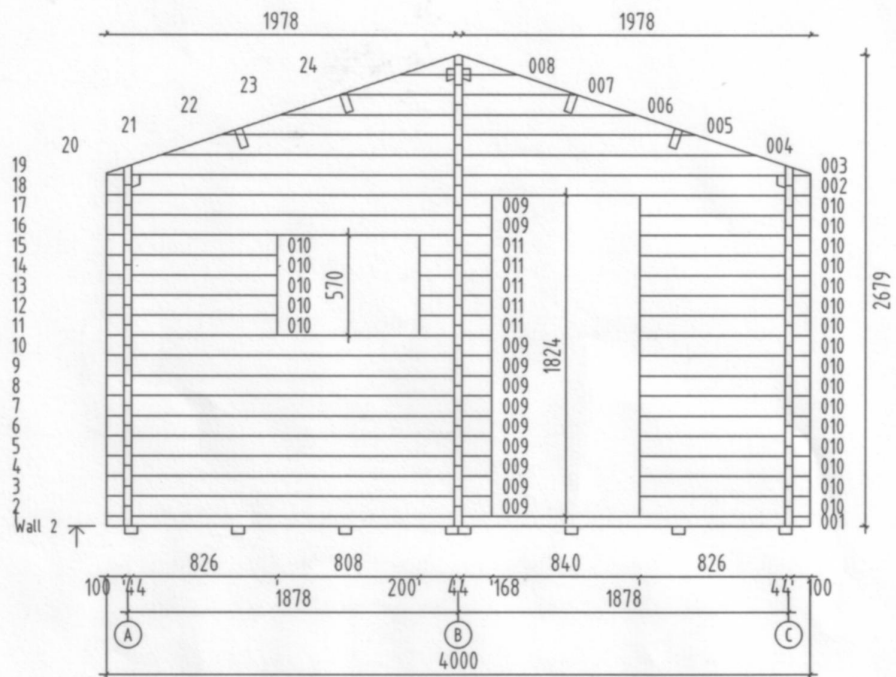
Either of the rooms can be built as the sauna room.
 Jeder der Räume kann als Saunaraum verwendet werden.
 Valfritt rum kan användas som basturum.
 В каждом из помещений может быть построена парилка.
 N'importe laquelle des deux pièces peut faire office de salle de sauna.



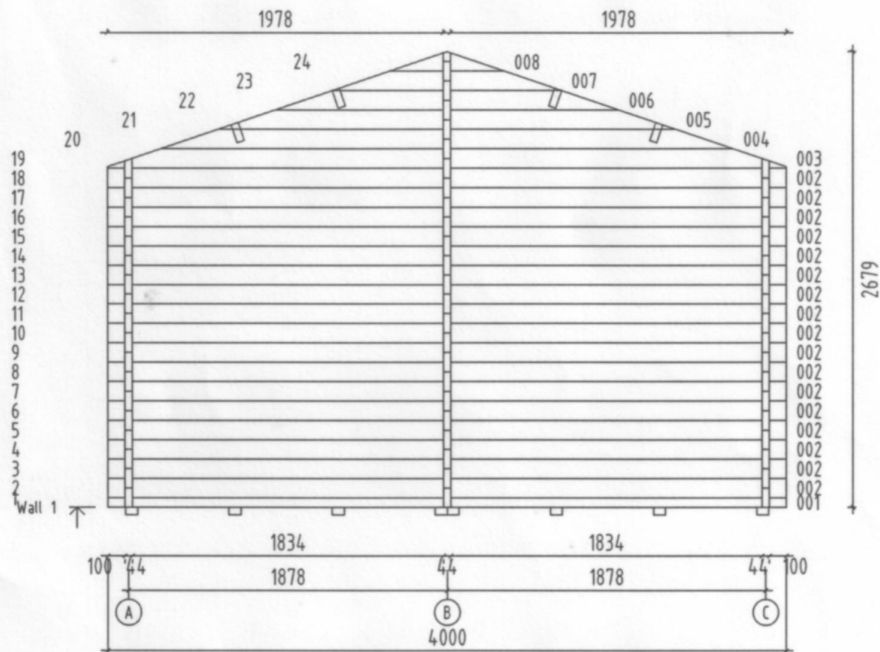
S Woodburning stove or electric sauna heater
 Holzbeheizter Saunaofen oder Elektrosaunaofen
 Vedeldad bastuugn eller elektriskt bastuaggregat
 Электрическая или дровяная каменка
 Poêle à bois ou générateur de vapeur de sauna électrique

KEITELE

Front wall
 Vorderwand
 Förvägg
 Передняя стена
 Paroi avant

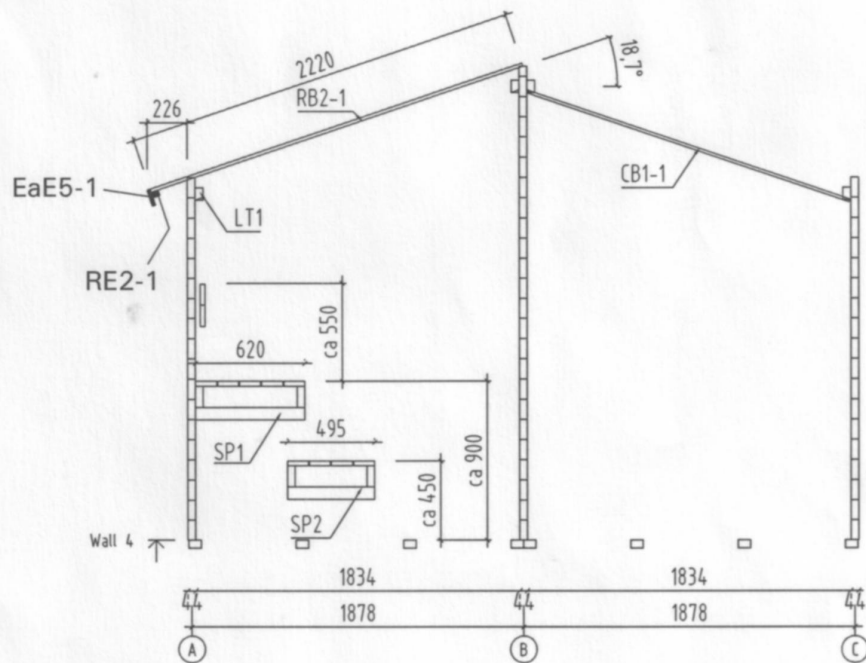
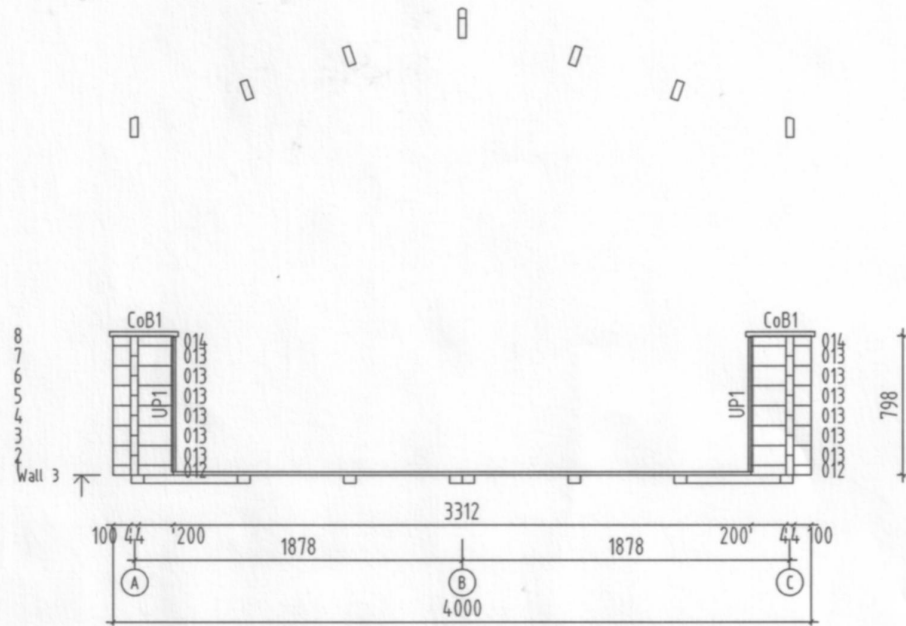


Back wall
 Rückwand
 Bakvägg
 Задняя стена
 Paroi arrière

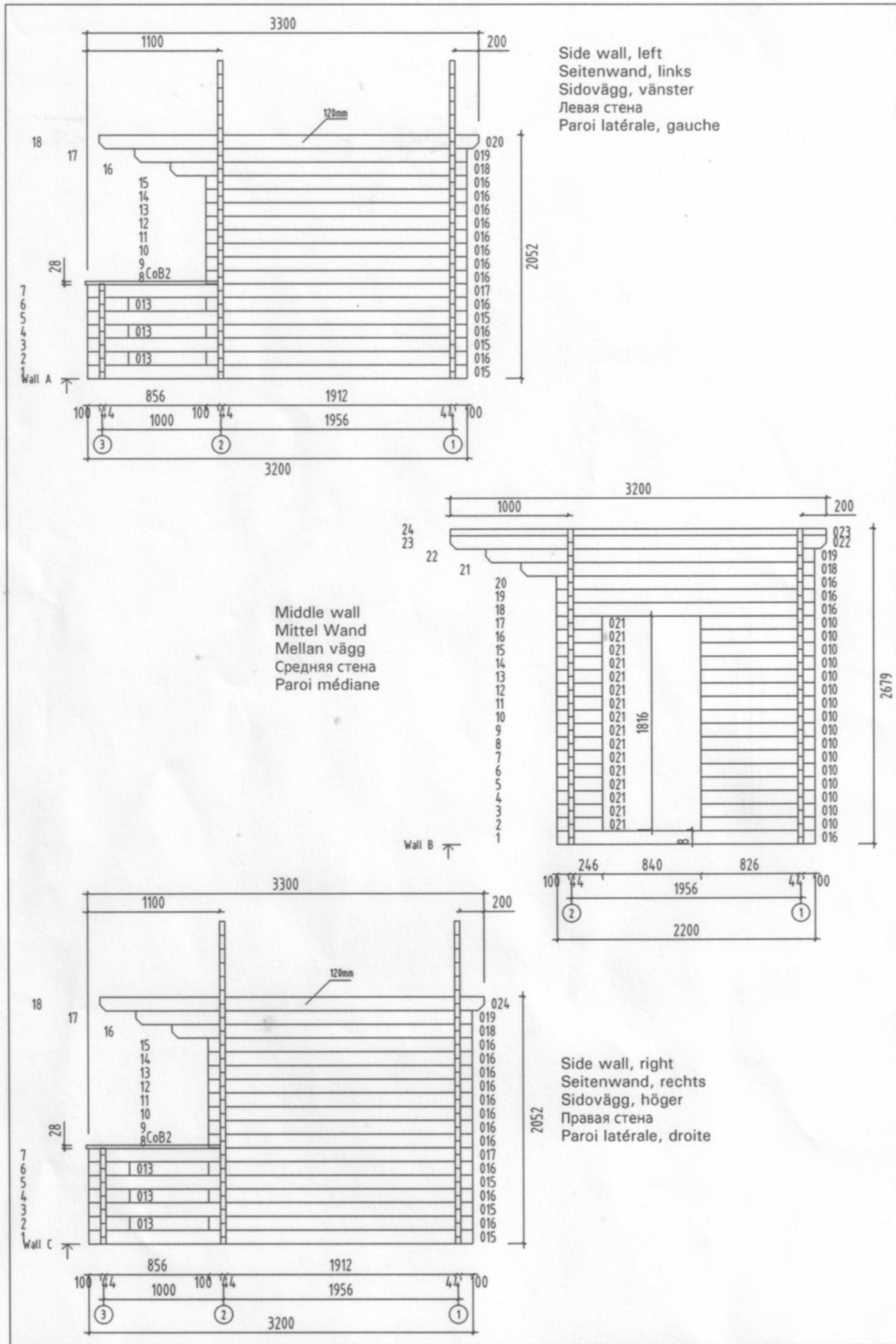


KEITELE

Terrace
Terrasse
Terrass
Teppaca
Terrasse

























KEITELE











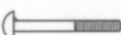









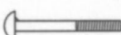
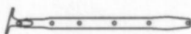
KEITELE

Pos	Material Материалы Matériau	Pcs. Anzahl St. Шт. Pièces	Size mm Größe mm Storlek mm Размер, мм Taille en mm
001		2	44x57x 4000
002		18	44x114x 4000
009		11	44x114x 2190
010		37	44x114x 970
011		5	44x114x 412
012		2	44x55x 344
013		18	44x114x 344
014		2	44x55x 344
015		6	44x114x 3200
016		26	44x114x 2200
017		2	44x114x 3200
018		3	44x114x 2500
019		3	44x114x 2800
020		1	44x114x 3200
021		16	44x114x 390
022		1	44x114x 3200
023		1	44x57x 3200
024		1	44x114x 3200
W1-1		1	
W2-1		1	
AR1	 Foundation / Fundament Bjälklagsbalk / Лага пола Fondation	8	70x45x 2990
AR2	 Foundation / Fundament Bjälklagsbalk / Лага пола Fondation	2	70x45x 538
LT1	 Ceiling support beam / Dachbalken Stödbalk tak / Потолочный брус Solve du plafond	4	45x70x 1905


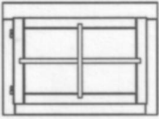


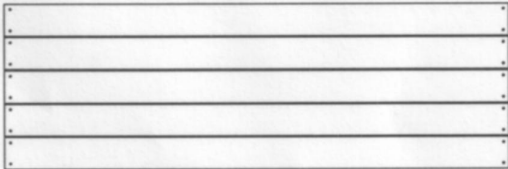
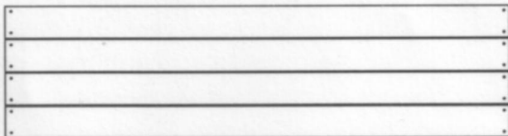

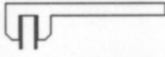
KEITELE

Pos	Material Материалы Matériau		Pcs. Anzahl St. Шт. Pièces	Size mm Größe mm Storlek mm Размер, мм Taille en mm
CoB2		Covering board / Deckbrett Täckbräda / Накладная доска Madrier de couverture	2	28x120x 1120
CoB1		Covering board / Deckbrett Täckbräda / Накладная доска Madrier de couverture	2	28x120x 394
SP1		Support brace / Stützleiste Stödlist / Опора полка Baguette de support	2	45x70x 620
SP2		Support brace / Stützleiste Stödlist / Опора полка Baguette de support	2	45x70x 495
UP1		U-profile board / U-Profileleiste Terrasslist / Доска с U-профилем Baguette profilée en U	2	25x55 x 770
PR1		Purlin / Dachpfette Takbalk / Обрешетина Arbalétrier	4	44x120x 3200
FB5-1	Floor boards / Fußbodenbretter Golvräddor / Доска пола Planches du sol		20	95x19 x 1827
RB2-1	Floor boards / Fußbodenbretter Golvräddor / Доска пола Planches du sol		22	89x19 x 1827
TB1-1	Terrace boards / Terrassenbretter Terrassräddor / Доска пола террасы Planches de la terrasse		10	95x19 x 3705
TB1-2	Terrace boards / Terrassenbretter Terrassräddor / Доска пола террасы Planches de la terrasse		1	45x19 x 3310
RB2-1	Roof boards / Dachbretter Takräddor / Доска крыши Panneaux de toiture		72	89x19 x 2220
CB1-1	Ceiling boards / Deckenbretter Takräddor / Потолочная доска Panneaux de plafond		44	89x16 x 1920
CeS1-1	Ceiling strips / Deckenstreifen Innertaklist / Потолочная рейка Lattes de plafond	OPTIONAL 	8	28x28 x 2100
Dia-1	Diamond / Deckbrett Fasaddiamant / Декоративная накладка Madrier	OPTIONAL 	2	19x140x 300
EaE5-1	Eave edging / Dachrandbrett Takfotsräddor / Карнизная доска Madrier en bordure du toit		2	19x95 x 3200
FaB7-1	Fascia boards / Stirnbretter Fasadräddor / Доска фриза Bordures d'avant-toit		4	19x120x 2260
FIB2-1	Floor beading / Fussbodenleiste Golvlöst / Плинтус Baguette du plancher	OPTIONAL 	8	19x19 x 1944
RE2-1	Roof edge reinforcement / Dachrandleiste Takfotsräddor / Усиление края крыши Baguette en bordure du toit		2	32x40x 3200
StB1-1	Storm brace / Sturmleiste Stormlister / Ветровая стяжка Protection contre le vent	NOT APPLICABLE 	4	25x45 x 2000
KLM6-1	Threaded rod / Gewindestange / Gängstag / Прут с резьбой / Tige filetées	NOT APPLICABLE 	1	 90
WB1-1	Weather boards / Wetterbretter Vattbräda / Прижимная доска Madrier contre le vent		4	16x45 x 2260

KEITELE

Pos	Material Материалы Matériau		Pcs. Anzahl St. Шт. Pièces	Size mm Größe mm Storlek mm Размер, мм Taille en mm
Fim	Fastening supplies/ Befestigung Fästenheter / Крепеж Fixations		1	USE
QPUP 08x80	Bolt / Schloss-schraube Bult / Болт M8 x 80 мм Boulon M8 x 80 mm PUPO	NOT APPLICABLE	8	StB1-1
QULSy damik 30/35	Lock cylinder and keys / Schlosszylinder und Schlüsseln Låscylinder med nycklar / Цилиндр замка с ключами Barillet de serrure et clés 30.35		1	U44-29R
QULKat eHOBEK	Door fittings / Türbeschlag Dörrbeslag / Дверные накладки Ferrure		1	U44-29R
QULNupp	Handle for sauna door / Griff für Saunatur Handtag till saunadörr / Ручка двери сауны Poignée de la porte du sauna		1	U44-30R
QULi nkHOBE	Door handle / Türgriff Handtag till dörr / Ручка входной двери Poignée de la porte		1	U44-29R
QNA1 4x40M	Nails / Nägel Spikar / Гвоздь 1,4 x 40 мм Clous 1,4 x 40 mm		100	CeS1-1; FIB2-1
QNA2 2x50Zn	Nails / Nägel Spikar / Гвоздь 2,5 x 50 мм Clous 2,5 x 50 mm		500	FB5-1; RB2-1; TB1-x CB1-1; ...
QNA3 x70ZN	Nails / Nägel Spikar / Гвоздь 3 x 70 мм Clous 3 x 70 mm		350	RB2-1
QMU8	Nuts / Muttern Muttrar / Гайка M8 Écrous M8 mm	NOT APPLICABLE	8	
YKarg lkoMU	Roofing shingle / Dachschindeln Takshingel / Гонт кровельный Bardeaux de toiture		6	
QNA2 x16Zn	Felt tacks / Filzzwecken Pappnubb / Гвоздь кровельный 2,0 x 16 мм Broquettes pour les feutres 2,0 x 16 mm		500	
QKR3 x20ZN	Screws / Schrauben Skravar / Шуруп 3 x 20 мм Vis 3 x 20 mm		10	U44-21R; A44-30R
QKR4 5x50ZN	Screws / Schrauben Skravar / Шуруп 4,5 x 50 мм Vis 4,5 x 50 mm		100	EaE5-1; FaB7-1; RE2-1; WB1-1; ...
QKR4 5x70ZN	Screws / Schrauben Skravar / Шуруп 4,5 x 70 мм Vis 4,5 x 70 mm		120	LT1; 001; 009; 010; ... SP2; SP3;
QKR5 x90ZN	Screws / Schrauben Skravar / Шуруп 5 x 90 мм Vis 5 x 90 mm		16	PRx
QKR6x 120ZN	Screws / Schrauben Skravar / Шуруп 6 x 120 мм Vis 6 x 120 mm		10	ARx
QSE8x22	Washers / Scheiben Brickor till gängstag / Шайба 8 x 22 мм Rondelles 8 x 22 mm		8	
QALp ainP	Handle for window / Griff für Fenster Handtag för fönster / Ручка окна Poignée pour fenêtre	NOT APPLICABLE	1	A44-30R
QAF2 40kZn	Catch for window / Riegel für Fenster Fönsterhasp / Фиксатор окна Espagnolette pour fenêtre		1	A44-30R

KEITELE

Pos	Material Материалы Matériau		Pcs. Anzahl St. Шт. Pièces	Size mm Größe mm Storlek mm Размер, мм Taille en mm
	Roller lock for sauna door / Rollverschluss für die Saunatür Rullkolv till bastudörr / Роликовая защелка двери сауны Loqueteau à rouleau pour la porte du sauna		1	
A44-30R	Window / Fenster Fönster / Окно Fenêtre 800 x 534 mm		1	
U44-29R	Front door / Tür Ytterdörr / Входная дверь Porte de devant 835 x 1822 mm		1	
U44-30R	Sauna door / Saunatür Bastudörr / Дверь сауны Porte du sauna 835 x 1822 mm		1	
	Upper bench / Obere Liege Övre lave / Верхний полк Banc supérieur		1	620x148x 1900
	Lower bench / Untere Liege Lägre lave / Нижний Полк Banc inférieur		1	495x148x 1900
	Backrest / Rückenlehnen Ryggstöd / Спинка Dossier		1	250x53 x 1900
	Tool for assembling (Twister) / Werkzeug für die Montage (Dreher Monteringsverktyg (vridverktyg) / Инструмент для сборки (крутилка) Outil d'assemblage (tordoir)		1	