MENNONITE FARM BUILDINGS

An Architectural History Theme Study



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On the cover: Early Mennonite homes in the West Reserve, as depicted by a newspaper artist, ca. 1878. (Provincial Archives Manitoba)

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PREFACE

This booklet has been adapted from a larger publication developed in 1984 by the Historic Resources Branch of Manitoba Culture, Heritage and Tourism. That study, *Architectural Heritage. The MSTW Planning District*, should still be available in public libraries.

That original study was intended to assist various local governments (Rural Municipalities of Stanley and Thompson and Towns of Morden and Winkler – hence the acronym MSTW), formed into the MSTW Planning District, to gain a better understanding of the architectural heritage of the area, and thus to undertake better educational, tourism, designation and conservation programs. To that end, this original work also contained a substantial selected inventory of buildings in the area, and sections focusing on other aspects of the region's history.

A major part of the study focused on farm buildings, and especially on the prevailing architectural traditions of one of the most common pioneer settlement groups in the region – Mennonites from Russia and other parts of eastern Europe. It is that section of the original report that has been adapted here, to enable readers to get a better sense of the traditional architectural styles and forms, materials and construction practices, that define this important aspect of Manitoba's architectural history.

There are many other areas of the province that have similar Mennonite building traditions, and this booklet, while focused on the area around Morden and Winkler, certainly contains information that applies to those places as well.

MENNONITE BUILDINGS

The Mennonites, like most other early immigrant groups who settled in Manitoba, brought their building techniques and traditions with them. In Manitoba, the Mennonites were unique in their establishment of farm-villages and their construction of the unified home/barn unit, both the products of over 200 years of development in Europe. For almost half a century these settlements dominated the character and landscape of much of southern Manitoba.

Gradually, as the Mennonites were assimilated into the mainstream of Canadian society, their traditional way of life and manner of building was modified to conform to local Canadian conventions. Today less than twenty villages remain in Manitoba, and within these, only remnants of the early architectural designs survive to offer testimony to the early days of settlement. Over half of these surviving villages are to be found in the MSTW Planning District.

Traditional Mennonite architecture played a much greater role than simply one of providing accommodation for its owners and their possessions. They were an important part of Mennonite culture. To appreciate and understand the nature of these architectural designs and the role they played in Mennonite life in the province, it is necessary to know something about the origins of the Mennonite village in Europe.

ORIGIN OF THE MENNONITE FARM VILLAGE

During the Protestant Reformation of the sixteenth century, a religious group called the Mennonites (named after one of their leaders, Menno Simons), was formed in the Netherlands and Switzerland. Like many other minority religious groups during this period, the Mennonites were often cruelly persecuted. Eventually thousands fled to the sparsely populated lowlands of Prussia and Poland. Here they were welcomed by noblemen and landlords, anxious for peaceful and industrious residents to assist in the economic development of unproductive swamplands. The Mennonites were granted religious tolerance and long term leases to land but they were not allowed to intermarry or mix with the indigenous Catholic population. As a result the Mennonites began to develop their own separate and distinct cultural identity.

It was here, in the Vistula and Nogat River deltas of Prussia and Poland, that the Mennonite farm village had its origins. When they first arrived, the Mennonites found a number of medieval "swamp" villages still existing in the marshes. It was on the plan of these existing villages that they patterned their own settlements. Each farmer's land-holding was limited to a long rectangular strip which extended from the high ground along the river or canal banks back into the marshlands.

Cultivation, land clearing and drainage progressed gradually from the farmstead into the hinterland until it was no longer economic to do so. As a consequence of this property division, the settlements were loosely organized with all the farm buildings in a single long row with the narrow plots of land stretched out behind them. The basic appearance of these early Mennonite villages was not unlike the early river lot settlements of French Canada.

Because the farm buildings within these settlements could only be located on the few and narrow areas of high ground along the canals, dams, riverbanks or on man-made mounds, multifunctional buildings became a necessity. The attachment of all farm buildings – house, barn and sheds - eventually became a distinguishing characteristic of these villages. This compact arrangement was not completely foreign to the Mennonites in any case. In the lowland areas of Holland, where many had originated, land had also been at a premium and a similar arrangement of buildings was common.

By the 1700s, the Mennonites had transformed much of the swampy lowlands into productive farmland. Using the diking procedures developed in the Netherlands, the Mennonites quickly began to prosper (Figure 1).



Figure 1
Through their efforts in draining swamplands bordering the Vistula and Nogat Rivers, the Mennonites won the respect of the Polish and Prussian governments and earned greater religious freedoms.

Their growing affluence, however, soon aroused the jealousy of the Polish middle classes. By the 1770s, increasing discrimination in economic and religious matters prompted many Mennonites to make plans for another major move.

Hearing of their plight, Catherine the Great of Russia invited the Mennonites to settle the sparsely populated lands north of the Black Sea, recently won from the Turkish Empire. In return for their settlement in Russia, Catherine offered the Mennonites assurance of religious freedom, property ownership, and, as a pacifist group, freedom from military service. The first Russian colony, Chortitza, was established near the Dnieper River in 1788 (Figure 2).

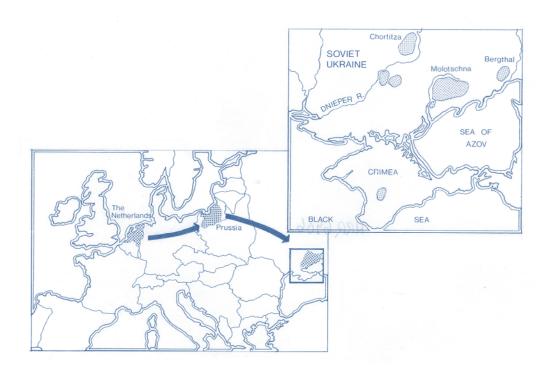


Figure 2
Mennonite movements in Europe and colonies in southern Russia.
(From F.H. Epp, 1974: 162)

Twenty years later another major colony was started along the Molotschna River, 160 kilometers to the southeast. By 1835 Chortitza had 15 villages, Molotschna 58 villages, and several daughter colonies were in the process of being formed.

The Mennonites initially established the farm villages in Russia exactly as they had in Prussia and Poland. However, repeated attacks by the nomadic Tartar population in the region soon forced a transition from a loose to a compact village organization. Under the new circumstances the previous system of land ownership that permitted each farmer to work his own large field had to be reformed. To produce more equitable distribution of the land surrounding the community, all the fields belonging to an each farmer (Figure 3).

Individual families received several narrow fields of varying quality around the village, as well as a village lot where farm buildings and garden plots would be located. The linear arrangement of the dwellings was maintained, as was the attachment of the house and farm buildings. This unification of buildings was well suited for the small village lots and the whole structure could be easily secured from the inside to discourage thievery. Johann Cornies, a prominent Mennonite reformer active during the mid-nineteenth century, standardized the village plan further by establishing rules for the location and construction of buildings, including churches and schools.

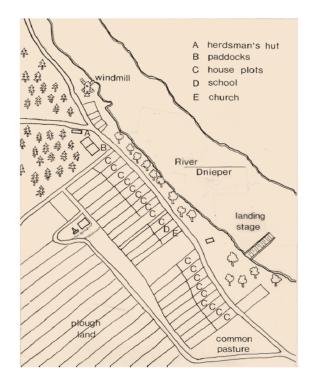


Figure 3
Village plan of the village of Insel-Chortitz, in the original Chortitza.
(Based upon a map in Osterwick 1812-1943. Clearbrook, B.C.: A. Olfert nd. P. 9)

To ensure economic viability, and still maintain the small rural nature of the villages, the inadvisability of property was adopted as a basic village principal. This prevented a farmer from dividing his land among his sons and reducing the farmland into uneconomically-sized units. Village population growth was accommodated, instead, by the creation of new villages. In this way village size, lifestyles and traditions were maintained while allowing for the growth and well-being of the colony.

Under Catherine the Great, and her grandson Paul, the Mennonites were granted, with only minor restrictions, self-government. Using the village as the basic unit of government the Mennonites formed their own system of administration, eventually establishing and operating their own schools, hospitals, orphanages and other social institutions. A village "shult" or mayor was elected annually by a council made up of village landowners. He was aided by two elected assistants, the "Braunt Shult" or fire-Marshall, whose duties included among others, the administration of the village fire insurance system and the operation of the communal pasture.

The village "Shulten" formed a district assembly called the "Gebietsmat" which elected an "Awa Shult" to oversee regional affairs and represent the colony before the Russian authorities. The church was closely involved with most aspects of village life and usually only members of the church in good standing sat on the various councils.

The farm village and its related architecture clearly played a major role in the development and preservation of Mennonite religious and cultural beliefs. The close proximity of neighbors in the village contributed to a communal spirit as well as to social cohesiveness. The agricultural economic base of the villages allowed the inhabitants to enjoy an isolated but often fruitful existence, free from unwanted external influences. The conformity of architectural designs themselves reflected an appreciation for simplicity and order, and prevented social stratification based on the show of personal wealth.

Under this intricate system and with the benefit of rich farmland, the Mennonite colonies in Russia soon began to thrive. By the 1850s many of the early house/barn units were being replaced by more substantial brick and stone structures (Figure 4). A few settlers even became successful entrepreneurs, owning factories and sometimes large farm estates. However, this prosperity, due to changing international politics was relatively short-lived.

During the early 1870s, the Russian government, alarmed at the rising power of her neighboring German nations, set in motion a program to "Russify" her colonists. Laws were passed which required the use of the Russian language in administrative and official correspondence. Soon, Russian was a required subject in all schools. The passage of the Universal Military Service Act in 1874, finally forced many of the Mennonites to make plans for yet another move. Some travelled to the region east of the Ural Mountains in central Russia, but for most, North America was the chosen destination. Within the next ten years, 18,000 – over one-third of the Russian Mennonite population – left for North America. Of these, 8,000 found their way to Canada and the new province of Manitoba.



Figure 4
Typical brick house/barn unit in one of the more prosperous of the Russian villages. (Mennonite Heritage Centre Archives)

MENNONITE VILLAGE DEVELOPMENT IN THE MSTW DISTRICT

When the Mennonite immigrants who had chosen Manitoba first arrived in the West Reserve in 1875, they immediately set about to re-establish the traditional order which had served them so well in Russia, and which had been guaranteed them by the Canadian government. One of the first and most important tasks they faced, after disembarking from the steamboat near Emerson, was the selection of the new village sites. While the women and children remained behind in temporary barracks, group leaders went out to investigate the land in the reserve. High ground in close proximity to a water source as well as the presence of well-drained prairie land for the production of crops and low-lying meadows for good livestock pasturage, were important considerations in choosing a village location. With these considerations in mind, the choice of the west half of the reserve was natural. The Pembina Hills spawned several flowing creeks and had abundant stands of timber. The prairie land to the east of the hills was fertile and well drained. Only one of the villages in the MSTW district, Blumenfeld, proved to be poorly located and had to be moved when the site became too wet during the spring.

Although the Dominion Lands Act required that quarter-section homesteads be registered according to individual settlers, a special hamlet privilege granted to the Mennonites allowed them to pool the land around a village site and re-survey it in the traditional village pattern (Figure 5).

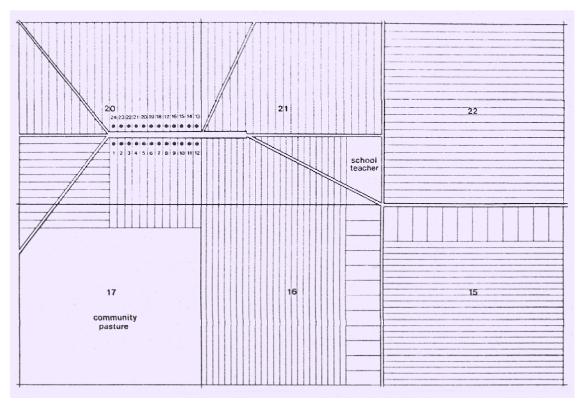


Figure 5
Original village plan of
Blumenfeld, showing the field
strips, village lots and the
community pasture. (MSTW
Planning District Background
Report: Rural Communities)

Most of the farm-villages consisted of a single street with narrow building lots extending back along one or both sides of the street. In the MSTW District, the latter was by far the more common type. Arable land around the village was divided into long narrow strips or "Koagels" and distributed equally among the farmers according to quality and location. The poorer low-lying areas were reserved for the community pasture.

Within each village, lots were laid out so that the buildings of individual farm units were placed about sixty metres apart and about thirty metres from the street to provide ample space for trees, gardens, and fences. Building lots were also reserved, usually in the village centre, for schools and church buildings. Towards one end of the village, and in a few cases, along a short side street, were the smaller lots of the "Anwohner" or non-farmer section. Generally, the homes of young married couples - still without farmland - tradesmen (Like shoemakers, tanners, watch-repairmen, and the village herdsman's hut would all be located in this area. In later years this would also be the location of a general store/post office or blacksmith's shop. The opposite end of the village street was traditionally reserved for the village windmill, necessary for grinding flour and sawing lumber, although mills were actually built in only a few villages (Reinland and Reinfeld were two examples) (Figure 6).



Figure 6
The Rein

The Reinland windmill, one of the early landmarks in the West Reserve. Constructed by Johann Bergman in 1878-79, it was used for grinding wheat and crushing feed until it was dismantled at the turn of the century. (Reinland, 1976: 53)

Traditional house/barn units were constructed in all of the villages but social and economic developments led over time to variations in design and methods of construction. In general these developments followed a recognizable pattern. The initial, pioneer, period lasted roughly seven years, from initial settlement in 1875 to the arrival of the railroad in 1882. Villages during this period were generally little more than a collection of crude, hastily constructed shelters and impermanent log structures. Agricultural production was at a subsistence level while early crop failures due to grasshopper infestations and early frosts forced many settlers to rely on government loans simply to survive.

After these initial hardships, economic conditions improved rapidly. By the time the railroad arrived in 1882, livestock and crop production had increased to the point where all the government loans had been repaid, and new, larger dwellings were being constructed in all of the villages. With better agricultural yields and the improved access to markets and suppliers provided by the railway, the communities entered a period of relative prosperity. During this, second, period of village development, lasting roughly from 1882 to 1900, village life and architecture designs in the MSTW district followed traditional patterns. Large, well-maintained house-barn units were not set in shady tree-lined streets. Village administration and institutions followed the conventional "Shult" system, and for the most part, agriculture production still followed the strip-field system.

By the turn of the century, however, change had come to many of the villages. Agricultural methods were revolutionized with the adoption of farm mechanization, and later the adoption of the public school system and municipal government demonstrated that many of the Mennonites were breaking with their past. By 1900 most of the villages in the East and parts of the West Reserve were abandoning the strip-field system, and farmers had begun to move out of the villages to farm individual homesteads, a practice better suited to mechanized farming. In the MSTW district, where the most conservative "Altkolonier" group had settled, traditions were not so readily abandoned. In time, however, they too were forced to come to terms with the new ways.

Many of the Mennonite leaders felt that these social changes had become unacceptable and in 1916 plans were made to move the entire Mennonite population in Manitoba to new colonies in Mexico. The first trainload left four years later, and by 1925 over 3,200 had left the reserve - less than 1,000 Mennonites chose to remain. The villages were drastically affected - in some cases entire communities were abandoned. Only the timely arrival of the "Russlaenders" Mennonites from the old colonies in Russia fleeing the turmoil of the Russian Revolution - saved many of the remaining villages in the MSTW district from vanishing entirely. However, the social makeup of the population, new and established, had been so altered that traditional life-styles lost their significance and architectural customs continued to be disregarded. In the remaining villages and on the individual farmsteads, during this period, farm buildings took on a transitional, and by the 1930s, a contemporary appearance.

Although the three major stages of village development and related architectural types can be clearly distinguished in the MSTW District, the nature and timing of each period often differed, and generally overlapped each other depending upon the time of settlement and the economic progress of individuals. At any one time villages could contain buildings from several different periods. However, each period was characterized by specific building types and thus lend themselves quite easily to individual consideration.

Pioneer Period (1875-1882)

After arriving at their designated village site, while the surveying of the village lots was being completed and supplies and materials gathered for more secure accommodation, many of the Mennonites found shelter in tents they had purchased during their journey. Others were forced to simply endure the elements until the first crude dwellings were completed; a task which often took several weeks.

These first dwellings were usually small and hastily erected. Like other pioneer groups in Manitoba, the Mennonites used materials at hand including soil, sod, timber and grass to construct a temporary shelter in which to pass the first winter. In the MSTW district, the Mennonites constructed several types of initial structures: sod huts known as "Semlins", thatch huts or "Sarais" and occasionally sod-roofed log cabins. The sod "Semlin" was by far the most common structure built during the first few years (Figure 7).



Figure 7
A reconstructed "Semlin", located at the Mennonite Village Museum at Steinbach, Manitoba.

The same type of shelter had also been used during the initial settlement of the Russian colonies a century before. Although similar in construction to sod huts built by other settler groups on the prairies, the "Semlin" adhered to traditional Mennonite planning in that it was often divided into two sections - one for the settlers and the other for the livestock. The consequent concentration of body heat helped to keep out the cold and made tending the animals easier during the winter months. It was also easier to construct than two separate structures.

Occasionally a farmer chose to build the "Sarai", essentially a steeply pitched thatched roof which rested on the ground (Figure 8).



Figure 8
An early "Sarai". This type of shelter was an alternative building style to the "Semlin", but was not as warm and therefore not as common. (Provincial Archives Manitoba)

The gable-shaped structure was about eight meters square, five and a half meters high at the peak, and was supported by long poles. Shiplap was sometimes used to line the family portion, and in a few cases this area was lined with logs. The "Sarai" was not as common as the "Semlin" in the MSTW district for it had been used by the first settlers in the East Reserve in 1874 and had proved to be much colder than the "Semlin". A number of settlers used this type of structure as a temporary stable for the livestock however.

Other Mennonite pioneers constructed simple, sod roofed log cabins often with attached stables (Figure 9).



Figure 9

Most of the early Mennonites in the West Reserve obtained logs for constructing their early shelters from the Pembina Hills. A few followed the example set by the southern Ontario settlers living there and built themselves small, sod-roofed log cabins. (Reinland, 1976: 53).

Like the other shelters, construction was simple and straightforward. Walls were built of thin round logs, connected by simple saddle notches and thickly plastered with clay. The roof usually consisted of a ridge pole supported by vertical timbers at either end of the structure. Thin rails were then placed on this and these in turn were covered with sod. Small glass windows and lumber from Emerson, enough for a door or perhaps a floor completed the structure. On occasion the walls were finished with a coating of whitewash. This protected the plaster and improved the appearance of the structure.

A few settlers constructed separate structures for the livestock, but as a contemporary account by Klass Wall who arrived by 1876 indicates, these first barns were often not as well constructed as the dwellings:

We also made somewhat of an excavation for our cattle barn. We erected the walls with split logs and put earth around them. It is sixteen feet long and sixteen feet wide. But its roof is only of hay, without spars and laths because of inadequate time, for sometimes it was already getting quite cold. (Reinland, 1976: 86)

None of these initial structures exist today. The Mennonite pioneers hoped that the first shelters they built would be temporary and so they were not intended to last. The materials themselves ensured that within a few years the structure would begin to deteriorate.

Traditional Period (1880 - 1900)

Early Structures (1880-1885)

The initial shelters constructed by the Mennonites were usually replaced within a few years by more secure structures. Although these structures usually followed the traditional house/barn design of the Russian colonies, there is still neither the time nor the materials available for the construction of large permanent buildings with carefully worked details. Many of these first house/barn units and especially the barn sections were small and hastily constructed (Figure 10).



Figure 10
Early Mennonite homes in the West Reserve, as depicted by a newspaper artist, ca. 1878.
(Provincial Archives Manitoba)

The house and barn were joined end to end, in the traditional manner, to form a long, single structure. The building was, as a rule, set perpendicular to the village street. Both house and barn always faced either east or south regardless of the side of the street on which they were located.

The floor plan of these early homes usually consisted of four rooms: the "Groote Shtov" (large room), the "Tjleene Shtov" (small room), the "Fae T'Hues" and "Alt T'Hues" (front and back hall) (Figure 11).

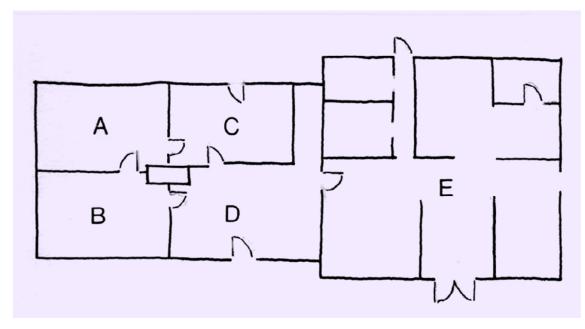


Figure 11
Floor plan an early Mennonite
house/barn: A – Tjleene Shtov; B
– Groote Shtov; C – Alt T'Hues;
D – Fae T'Hues; and E - Shtall.

The "Groote Shtov" doubled as the living room and bedroom for the parents and infants. The "Tjleene Shtov" and "Alt T'Hues" were used as children's bedrooms and the kitchen was usually located in the "Fae T'Hues". The number of rooms often varied in these early houses, with one or two walls being added or removed depending upon family size and resources.

The house was invariably constructed of logs and covered with a thatched roof as milled lumber was still unavailable or unaffordable. Because the main building material in the Russian colonies, for many years, had been brick, the Mennonites in Manitoba were unfamiliar with log construction techniques and had to rely on examples and advice provided by neighbouring English settlers. As a result, the majority of the early house/barn units in the MSTW district were built using the dovetail or a variation of the saddle notch method, both popular with the Anglo/Ontarian settlers in the region. For the same reason, the Mennonites in the East Reserve used the "pièce-sur-pièce" or post-and-fill method of log construction commonly found in the neighbouring French and Métis settlements along the Red River.

Fortunately, several early log structures still survive in the MSTW district, although they are rapidly deteriorating. As one would suspect from descriptions of pioneer Mennonite life, these log buildings seem to have been relatively crude and hastily built. One example, built around 1876 in the village of Hochfeld and still occupied, has logs that were sawn smooth on the inside but left round on the exterior side (Figure 12). In this example saddle notches were used at the corners. A rare example of post and fill construction still exists in the village of Osterwick (Figure 13).





Figure 12

Peter Wiebe residence, Hochfeld, ca. 1876.

Figure 13

Former Jake Theissen residence, Osterwick, ca. 1878.

This technique had the advantage of incorporating short lengths of timber which made handling and actual construction much easier than the other methods. In this case the timbers used for the uprights were squared and attached to sill and top plates with a simple mortise and tenon notch. The horizontal filler logs were left in the round and simply wedged between the uprights. Post-and-fill construction usually entailed more careful construction; the short filler logs were cut with a tongue that fit into a groove cut into the vertical post. In addition, diagonal bracing at the corners of post-and-fill structures lapped across the post and beam, strengthening the whole building. In this case, however, the diagonal braces were not lapped over the filler logs. Instead, tiny pieces of log were simply stuffed into the small triangular opening (Figure 14). A thick coating of mud plaster applied to both sides of the wall helped keep the filler logs in place.

Another early house, constructed around 1878 and now located at the Pembina Valley Thresher men's Museum near Winkler, exhibits the more commonly used dovetail method of log construction (Figure 15).

With this method the logs were hewn square and the corner notches expertly cut allowing few spaces between the logs. This building also features a variety of carefully constructed joints which suggest that despite its early construction date it was well built and intended to last for some time (Figure 16).

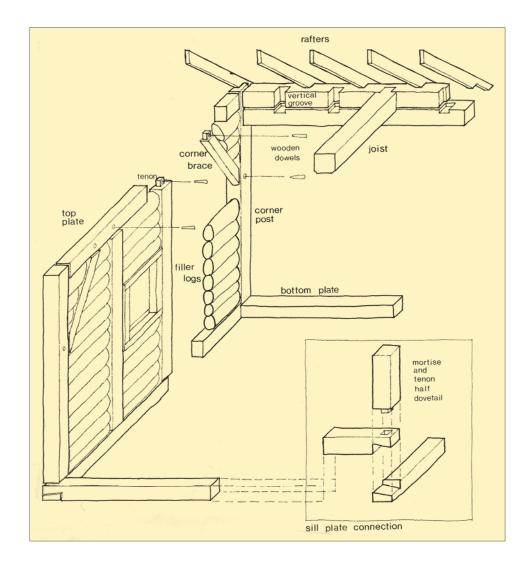


Figure 14
Theissen residence:
construction details.



Figure 15

The majority of early log houses featured the dovetail method of log construction. This example, now a museum piece, is one of the few remaining good examples in the MSTW district.

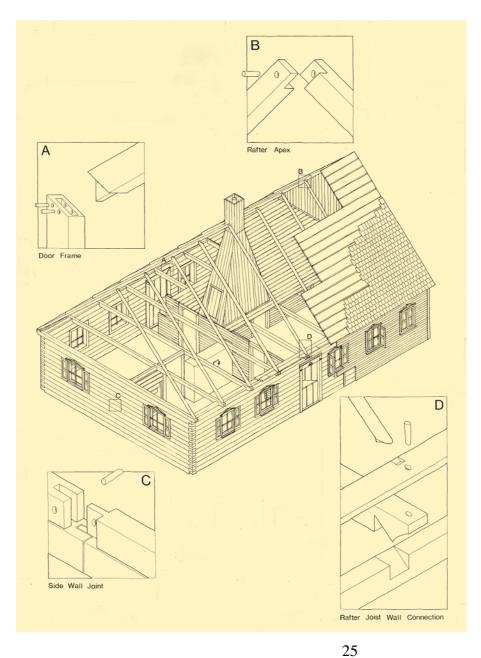


Figure 16

Dovetail log house: construction details. Traditional features like the wooden shutters, brick heater and attic smoker in the illustration, although not currently in the building, were likely once present.

As in most of the early log structures few nails were used in its construction; wooden dowels were used at all the major joints. Although the roof is now sheathed with wooden shingles, the presence of log rafters suggests that it originally had a thatch roof. Although the interior arrangement appears to have been altered, much of the basic structure remains unchanged, witness to the skill of its builder.

Although basic construction methods varied, most of the early log homes were very similar in appearance. Walls were plastered inside and out with a mixture of clay and straw to which a layer of whitewash was applied, Harding the surface and giving it a more finished appearance. The thick plaster also served to insulate the building, keeping it warm during the winter and cool during the summer months. Roofs were constructed of grass thatch obtained from the edges of sloughs or creek banks. Initially, holes were simply left in the roof for smoke from the cook stove to escape, but before long tin stovepipes were introduced. Often the floors of early homes were of earth, hardened with sour milk and wood shavings. Cut lumber was used sparingly, usually for the ceiling, gable ends, doors, and occasionally for a floor. Since hinges, latches and furniture were normally homemade from logs, the only additional cost, besides lumber, was the cost of a few nails (Figure 17).

Barns were generally added a few years after the house was completed. The few head of stock kept during the early years were housed in the initial sod or thatch shelters until a more secure structure could be built. None of these small early barns still survive in the MSTW District; however, photographs suggest that many of these consisted simply of a small stable area with hay storage in the loft above (Figure 18).





Figure 17
Interior scene of an early
Mennonite home, as depicted by
a newspaper artist. (Provincial
Archives Manitoba.)

Figure 18
An early house/barn unit, ca.
1878. Note the small barn
section. (Winkler, 1982: 162.)

Later Structures (1885-1900)

Depending upon the care with which they were constructed, and the economic progress of the settler, most of the early house/barn units were replaced within ten years of their construction. The earlier structures were usually dismantled to make room for the new house at the front of the yard lot because this, by tradition, was where a Mennonite house was located. As the necessary time and resources were generally now available, the new house/barn units were large and carefully constructed with close attention given to many of the traditional elements such as floor plan and interior fixtures (Figure 19). Like the earlier units, the house and barn section were often constructed separately.



Figure 19 Isaac Wiens farmstead, Rosebach, 1895. (Winkler, 1982: 25).

While houses built during the 1880s were generally still of log construction, those built during the 1890s featured a light timber frame or sometimes a stacked-lumber system more commonly used in the construction of cribbed grain elevators (Figure 20 and 21).

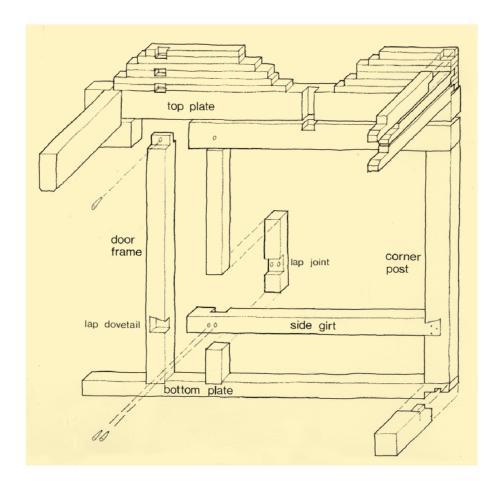


Figure 20

C. Unrau residence, Village of Chortitz: construction details.

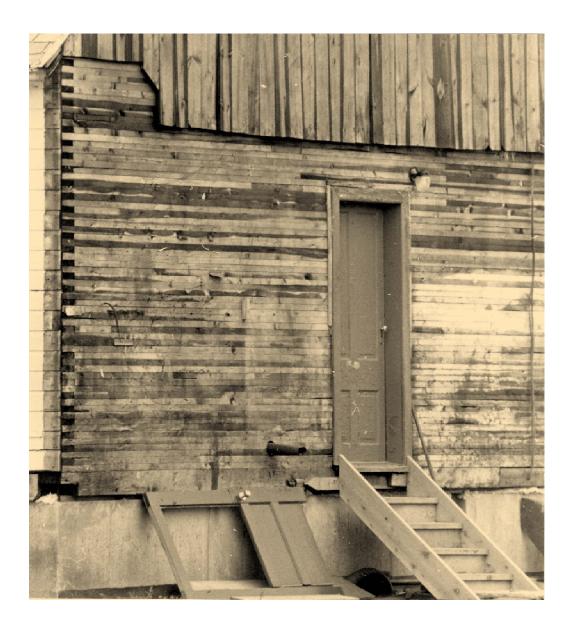


Figure 21

Corner detail: crib wall construction.

Wood frame construction was not generally used until after the turn of the century. During this period roofs sheathed with wooden shingles began to replace thatch and, as rapid run-off of rain was no longer critical, this was usually accompanied by a slight lowering of the roof line and slope. Horizontal wood siding, which eliminated the regular repairs necessary to maintain mud-coated walls, became increasingly common as did wooden storm shutters (Figure 22). During the winter months these were often kept closed, especially at night, to help retain the interior heat. These later houses usually featured a multi-roomed floor plan closely based on the traditional Russian model (Figure 23).



Figure 22
Mennonite houses constructed in the MSTW district, before the turn of the century, were characterized by exterior wooden shutters.

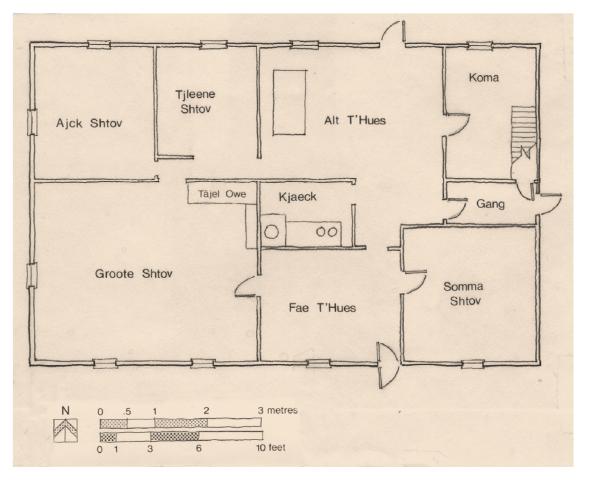


Figure 23
Typical floor plan of a traditional Mennonite house.

The house was divided into two equal parts. In the front half of the house, towards the street, was one or two bedrooms for the girls and smaller children, as well as the parents' room which often doubled as a living room. In the rear half, closer to the barn, was the main kitchen/dining area, a large utility room which often doubled as the boys' bedroom, the pantry where the stairs to the basement were usually located, a small entrance hall in the front of the building and a small cooking room in the centre of the building which opened onto the kitchen/dining area and had two large open windows to let in light. Located between the pantry and utility room was the "Gang" or hallway with doors at either end which separated the main living area of the house from the barn. The staircase to the attic was usually accessed from this passageway.

Above the ceiling of the cooking room, in the attic, a large tapering chimney or "Rajka Koma" was often constructed. This chimney served a double purpose. It not only kept sparks from flying out too quickly and igniting the roof, (this was especially important when thatched roofs were common), but it also could be used as a smokehouse for curing meats. The chimney was usually about two metres square at the bottom. Access to it, for cleaning or inserting meat, was gained through a large metal door. None of the remaining house/barn units in the MSTW district still have either the central cooking room or the smoke chamber above it; the only known house with these features was previously located in the village of Chortitz, and it is now situated in the Mennonite Village Museum in Steinbach (Figure 24). The interior walls of the new homes were initially lined with shiplap, but in later years this was often covered with wainscott panelling and wall paper (Figure 25). The ceiling joists, which were invariably exposed, were usually cut square and the bottom corners bevelled (Figure 26).





Figure 24

Many of the traditional Mennonite houses had smoke chambers built into the chimney above the kitchen area for curing meats.

Figure 25

Interior of one of the better presreved early Mennonite homes as photographed during the 1950s. (Provincial Archives Manitoba) This simple bevel was actually one of the few decorative features in the largely utilitarian design of the house. Another standard interior fixture was the "Glauss Shaup" or china cabinet built into the walls of the "Groote Shtov" next to the brick heater (Figure 27).

Finally, in the few homes where some of the original walls remain, such as the Wiebe house in Hochfeld, the wall separating the "Groote Shtov" from the "Ajck Shtov" features an interesting tongue and groove construction with the uprights possessing the same bevelled edges as the ceiling joists (Figure 28). The large brick heater or "Tajel Owe" located in the centre of the building, was an item of great importance and could be found in most of the dwellings constructed during this period. A portion of it extended into several of the rooms in the front half of the house, and as a result, it acted as an efficient central heating system, (Figure 29).

Though used primarily for heating, it had a return-flu and often a space on top of the fire box which could be used for cooking. Because of its large size and brick construction, it usually kept the house warm even if stoked only twice a day. It was fired from the kitchen and worked equally well with a variety of fuel. During the early years, ample firewood could be obtained from the Pembina hills, but by the 1890s this source ran out and the Mennonites resorted to the use of "Mest sooden", or manure bricks, a type of fuel which they had been used for a time in Russia. To prepare the bricks, moist manure and straw were spread on the ground to a depth of about one foot. Horses were then walked over this until it was well mixed and fairly compact. The mixture was then allowed to dry for a few days, after which it was cut into squares and piled in such a manner that air could circulate through it while the drying process was completed (Figure 30).



Figure 26

Former Heide residence, Village of Hochfeld: interior view showing exposed joists, wainscotting and doorways leading to (left to right) the pantry, the attic and the barn.



Figure 27

The "Glauss Shaup" was a standard interior fixture in most Mennonite homes.

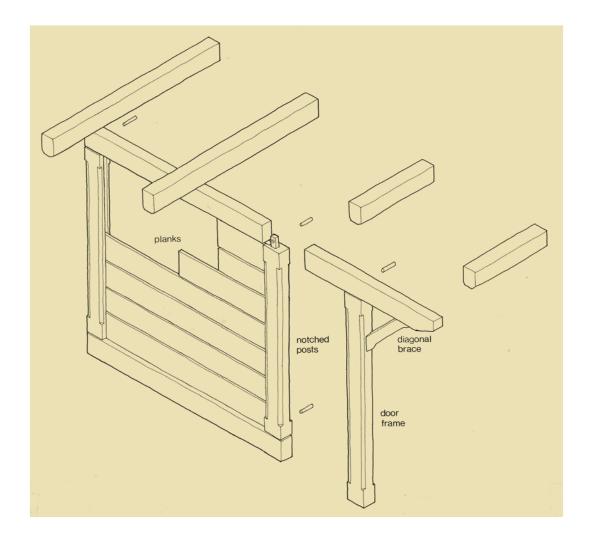


Figure 28

Peter Wiebe residence, Hochfeld: wall construction detail.

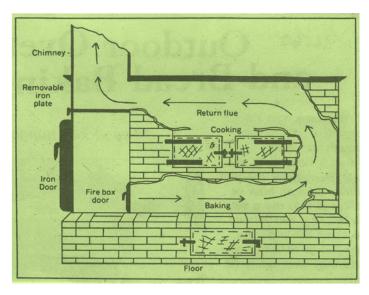




Figure 29

Typical Mennonite brick heater. Most of these units, in the MSTW district, were given an exterior coating of plaster and whitewash. (Reflections on Our Heritage, 1971: 31)

Figure 30

For many years, "Mest Sooden" or manure bricks were a common source of fuel in the MSTW district.

Fuel made in this manner was cheap, odourless and provided a slow but adequate heat. Manure bricks were used till the turn of the century when coal became the standard type of fuel, although during the 1930s and early 1940s they were again used for a time. Only four of these traditional brick heaters are known to still exist in the MSTW district (Figure 31).

The barn section of the house/barn units constructed during this later period was, like the house section, modeled after the designs used in the Russian colonies. It was invariably much larger than the house and, although the size and floor plan varied according to construction date and economic resources of the owner, it usually consisted of three major sections. These were the "Shtaull" or main stable area, the "Sheen" or threshing area and the "Owesied" for grain storage and the raising of poultry and hogs (Figure 32).

As a rule the basic structure was slightly wider than the house, extending approximately half a metre beyond it on each side. The walls and ridge of the roof were also about a metre higher although the slope of the roof was the same as the house. The barn was of timber frame construction and usually sheathed with vertical siding. Like the house section, thatch was the common roofing material during the 1880s and early 1890s, but by the turn of the century wooden shingles and horizontal siding were becoming more common.



Figure 31
Brick heater in the home of H. Ens in the Village of Reinland.

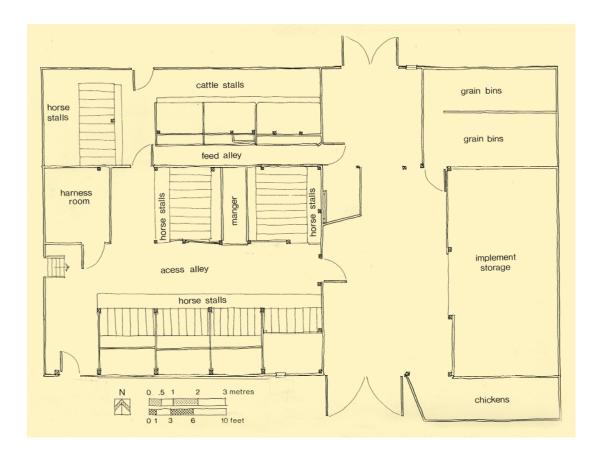


Figure 32
J.F. Ens barn, Village of
Reinland, ca. 1885: floor plan.
This structure is one of the few
well preserved Mennonite barns
in the planning district.

The stable area of the barn was always adjacent to the house. The interior arrangement, although varied, usually consisted of a central aisle with doors at both end and stalls along either side; cow stalls along one side and horse stalls along the other. Two additional doors were located along the front and rear walls near the dividing wall between the barn and house. Light for the stable was provided by a row of small windows along the length of the front of the barn just below ceiling level. Because sunlight entered the room from only one side, the stalls located along the opposite wall were often set sideways, so that the animals would not shade themselves while feeding. The majority of the stalls in the Mennonite barns were for horses, which were the main source of farm power until the 1930s. Cows were raised purely for domestic use and only a small number were kept at one time. Another common feature of the stable was a small storeroom such as the one located in the Ens barn in Reinland. This room was commonly used for storing harnesses, hand tools, and miscellaneous small items (Figure 33).



Figure 33
Early handmade tools: a bucksaw, a harness repair vice and a garden rake

The "Sheen" was traditionally the area where the threshing of grain was conducted. It consisted of two sections: a large open area where the threshing floor was located, and an adjacent storage area; the lower level of which was used to store the various types of grain and a loft area above where the straw was stored for use as livestock bedding. This section of the barn was characterized by two large doors which allowed a team and wagon to be driven directly into the area (Figure 34).

Also, because the stable loft or "Behn" was via a small door positioned above the stable windows at the front of the structure.

Although present in many of the barns constructed in the MSTW district, the "Sheen" section soon took on a different function than originally intended. By the time the Mennonites who settled in Manitoba could afford to construct large traditional barns, steam-powered threshing machines were becoming available. As all threshing activities were now conducted outside, the "Sheen" was no longer required and was put to use as an extra storage area for hay and equipment. In the Ens barn, a cutter, wagon, and miscellaneous other items are still being stored in this area, as they were in years past (Figure 35).



Figure 34

Typical "Sheen" doors. The criss-crossing pattern was typical of Mennonite barns in both Prussia and Russia and was found on virtually all traditional style barns in Manitoba.





Figure 35
The "Sheen" area in many
Mennonite barns was used to
store items such as wagons and
cutters.

The "Owesied" was a section created by the continuation of the roof, almost to the ground. As a result, it was often only two or three meters wide. One long continuous "Owesied" section along the rear side of the barn was most common, although occasionally this was divided into two separate sections by a second set of large doors giving access to the "Sheen" and which allowed a wagon to be driven directly through the barn. Also, a number of barns had an additional short "Owesied" on the front of the barn. The primary purpose of the "Owesied" was the storage of livestock feed, seed grain and fuel, as well as housing poultry and hogs. In some cases, however, the slope of the roof on the rear 'Owesied" was reduced, allowing for a much wider space, and in these cases, the portion located adjacent to the stable area was used for extra horse and cattle stalls (Figure 36).

Another common feature of many of the Mennonite barns was the "Sheua". This was a large shed roofed section attached to the far end of the barn and used for machinery storage or as a fowling and calving area (Figure 37).

Apparently, this section was not commonly found on Mennonite barns in Russia, but, by the turn of the century it had become a standard feature of many Mennonite farmyards in the MSTW District.

A final, yet important, characteristic of most Mennonite barns was the "Braunt Lada", or fire ladder, and the "Booshoake", or fire-hook, both of which were used for removing bags of grain from a burning loft or for pulling down a burning wall or roof (Figure 38).



Figure 36
Hiede barn, Village of Hochfeld.
A number of barns in the MSTW villages had wide "Owesied" sections, part of which acted as a second stable area.



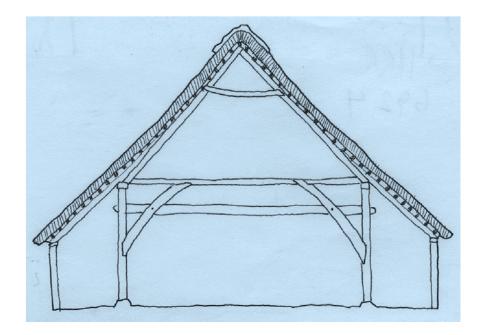
Figure 37
P.A. Rempel barn, Village of
Neuenburg. Although not part of
the traditional barn design, a rear
"Sheua" section was often added
to the barns in the MSTW district.



Figure 38
Detail of a hand-forged
"Booshoake" or fire hook. This
once common item was used for
pulling down burning buildings
and, thus, preventing fires from
spreading to neighbouring
structures.

These items were a strict requirement of the Mennonite fire-insurance program during the early years of settlement, and they were usually hung on the front wall of the barn, either above the row of stable windows, or on the wall of the front "Owesied".

In addition to its exterior appearance, the traditional Mennonite barn was distinguished by its heavy post-and-beam interior framework. Although some of the mortise-and-tenon joinery was similar to that used in southern Ontario style barns, the design of the framework clearly reflects the northern European roots of Mennonite building techniques (Figure 39).



Section from a medieval Danish barn. During the seventeenth century Mennonites in the Polish and Prussian colonies adopted framing methods commonly used in Denmark and other northern European countries. This same

Figure 39

method of framing was used extensively in later colonies in Russia and Manitoba. (T. Faber, A History of Danish Architecture.) Each set of posts and connecting beams which traversed the width of the barn was commonly known as a bent. Each bent was assembled on the ground and raised into place, much like strut rafters are today. Typically each bent in the Mennonite style of barn consisted of 200 x 200 mm (8" x 8") posts which extended from a large sill beam at ground level to the height of the exterior wall, which was usually about three metres high. Similar sized beams, which acted as ceiling joists, were connected to each set of posts about one metre from the top. These connections were supported by diagonal sway braces. After all of the bents were raised into position, they were secured by a plate beam which spanned the full length of the structure, and acted as a seat for the rafters which were raised last (Figure 40).

Depending upon their location within the structure, additional posts and beams were added to this basic bent design. In the stable, approximately every fourth bent had an extra joist or tie-beam connected to the top plate. Invariably, these were strengthened with a continuation of the lower sway brace. After the bents were raised, connecting beams were also positioned beneath the joists along either side of the central valley and supported by posts at various locations (Figure 41).

A third tie-beam was often added to the bents which were located at the ends of the structure as well as those on either side of the "Sheen" alley. These bents also had additional posts and beams positioned below the main joints to act as a frame for wall boards and doors (Figure 42).

Standard mortise and tenon notches were used at all the perpendicular joints while an unusual type of formed lap-notch was used in all the diagonal joints (Figure 43).

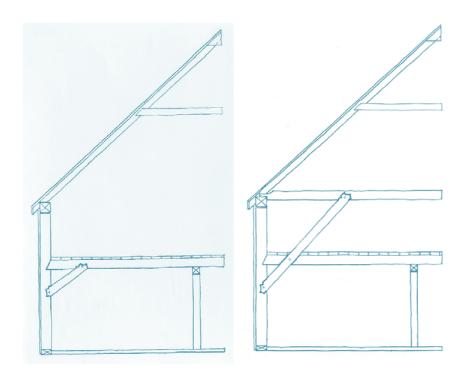


Figure 40
Standard bent design commonly found in the stable section of ost Mennonite barns.

Figure 41

J.F. Ens barn, Village of Reinland: barn bent.

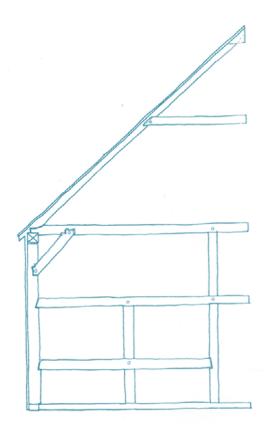


Figure 42

J.F. Ens barn, Village of Reinland: barn bent



Figure 43
The sway braces in most Mennonite barns featured an unusual lap notch.

This type of notch, in Manitoba, appears to be exclusive to structures of Mennonite origin, and was no doubt transplanted from Europe as was the entire barn design. All the major joints were secured with wooden pegs. Like the more conventional mortise and tenon joints, the Mennonite lap joints were usually expertly cut and fitted. Examples were found where even a paper-clip could not be forced into the joint seam.

Unlike the southern Ontario style barns in the MSTW district, bents in the Mennonite barns were positioned quite close together, usually one and a half metres apart, and as a result, as many as twenty individual bents were used in the construction of a typical Mennonite barn, as opposed to four to six bents in a typical southern Ontario style barn.

Construction of the "Owesied" sections of the barn was much less complicated. The outside wall of the "Owesied" consisted of 125 mm posts or $50 \times 150 \text{ mm}$ (2" $\times 6$ ") studs which rested on a sill beam at one metre intervals. They were joined by a top plate of two 50×150 s, and the distance from this wall to the main barn wall was simply spanned by $50 \times 200 \text{ mm}$ rafters. Most of the connections in the "Owesied" were nailed.

During the early years of the traditional period, the barns were usually sided with vertical board and batten planks and the roofs sheathed with grass thatch. Foundations were usually loose fieldstone and the floors simply dirt or loose planks. By the late 1890s, however, horizontal drop siding and wooden shingles were increasingly being used as sheathing material as well as concrete for foundations and floors.

Transitional Period (1900-1925)

Around the turn of the century, as the Mennonites in the MSTW district began to be assimilated into the mainstream of Canadian society, strict adherence to traditions began to wane. This was reflected not only culturally, as more Mennonites began accepting municipal government and public schools, but architecturally as well. The adoption of farm mechanization was especially disruptive. The "Raine" or strip field system proved to be unsuited to mechanization and, as residents began to move out to individual farmsteads, many villages began to break up. Moreover those Mennonites who did move onto farmsteads rarely chose to construct the customary house/barn units, but instead erected separated structures of contemporary design (Figure 44).



Figure 44

Jacob Loewen farmstead, eight kilometres north of Winkler, 1906. Most of the Mennonites who moved out of the villages to individual quarter section farms constructed houses and farm buildings of contemporary design. (Manitoba Mennonite Memories, 1974: 262)

The more conservative Mennonites who remained in the villages, tended to continue constructing attached units. While the general shape and exterior appearance of the house was usually retained, a number of modifications began to be introduced. One of the most notable was the re-orientation of new homes so that they now faced the village street resulting in a "T"-shaped plan (Figure 45).

This arrangement was looked upon as being more attractive, and it improved hygiene by further separating the barn from the house through use of a small connecting link. Often this link was the rear portion of the original house which was retained when the new one was constructed (Figure 46).

These new arrangements resulted in a slightly modified floor plan in the new homes. The interior "Gang", or connecting alleyway, was no longer necessary and was eliminated. The "Somma Shtov" was often removed from the plan to enlarge the kitchen area, as was the small cooking room in the centre of the building. In a few cases dormer windows were installed in the upper storey and the space used for bedrooms. This allowed the enlargement of the "Ajck Shtov" by reducing the size of the "Tjleene Shtov" which generally became the washroom. The new "Ajck Shtov" generally became the parents' bedroom, and the "Groote Shtov" was now used exclusively as the living room (Figure 47). Similar internal changes were introduced to older houses being renovated at this time.



Figure 45

Jacob Peters residence, Village of Reinland. After the turn of the century many Mennonites broke with tradition and constructed houses which faced the village street.





Figure 46

Henry Ens residence, Village of Reinland. On the left, the link in the context as a connection between the house and the barn. On the right, the link in more detail.

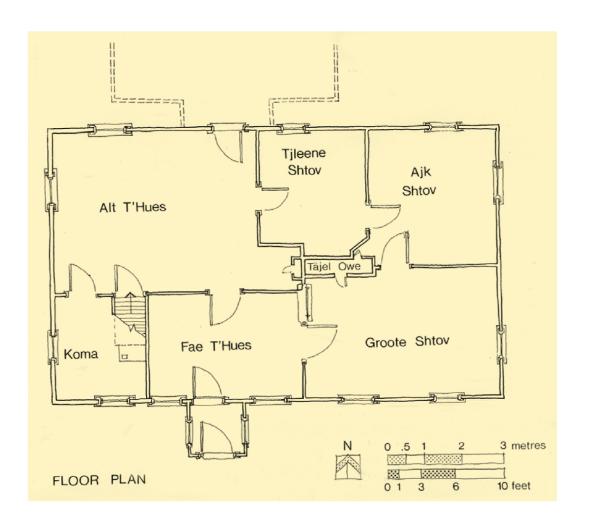


Figure 47

H. Ens residence: Floor plan.

Few of the homes built after 1900 included the traditional central brick heater, as coal and oil-burning furnaces were increasingly being installed in the basements. This also eliminated the traditional smoke chamber in the attic. As a result smoke houses were often constructed outside near the summer kitchen and this proved to be more efficient and convenient.

Barns constructed during this period also reflected a growing acceptance of contemporary designs. The heavy timber framework of the earlier barns was replaced with a light timber framework. In such cases, traditional bent designs and joinery were generally still used, although in a more simplified manner (Figure 48).





Figure 48

Heide barn, Village of Hochfeld, ca. 1912. Many of the barns constructed after the turn of the century featured a light timber framework, more simplified joints and nailed connections.

By 1910 many barns were being constructed entirely of frame lumber, and it was at this time that a number of basic design changes began to appear. In many Mennonite farmyards, separate outbuildings were now being constructed for poultry, hogs and grain storage; the "Owesied" sections were no longer required and were excluded from the new barns being constructed. This in turn affected the basic fenestration pattern of the barn. Many barns now featured larger, separated windows on both sides of the structure, rather than the traditional single row of small windows along the front. Also, the adoption of the hay sling during this period, affected both roof shape and rafter design. To accommodate use of the sling, the area directly beneath the roof peak had to be free from obstruction. In some cases, this was achieved by simply replacing the rafter purlins with two diagonal braces (Figure 49).

In other cases, the entire roof was replaced with a more contemporary, gambrel shaped roof, which was self-supporting and had a high volume storage capacity (Figure 50).

Finally, during the early 1920s the Mennonites in the MSTW district increasingly constructed houses and barns which were detached.

By the late 1920s, barns, as well as homes, were almost entirely of contemporary design and construction. Traditional elements were not completely abandoned, however. Until recently vestiges of traditional Mennonite design were often incorporated into structures, including the use of window shutters, large "Sheen" style doors on the barns and outbuildings, and the occasional attachment of house and barn via a connecting link (Figure 51).

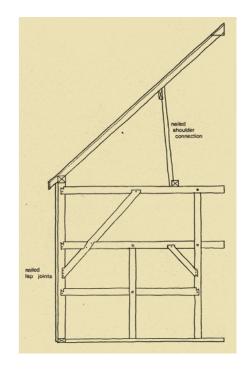


Figure 49
With the adoption of hay sling, shortly after the turn of the century, an open span type of rafter was required, which resulted in the modification or complete removal of the original barn rafters?





Figure 50

Jacob Peters barn, Village of Reinland, 1912. The protective peak extension over the sling tracking mechanism was an innovation.

Figure 51

Petkau farmstead, Village of Reinland. (Reinland, 1976: 105)

Other Farm Buildings

The traditional Mennonite house/barn unit was essentially a self-contained farmstead. It combined under one continuous roof a large residence plus facilities for horses, cattle, hogs, and poultry as well as storage areas for hay, fee, and farm implements. During the early years of settlement, when only a few head of livestock were kept and crop acreages were still small, there was little need for other farm buildings. As the Mennonites became more established, however, and with the adoption of mechanized farming methods during the 1890s, additional facilities were required and a variety of small separate farm buildings began to appear. Included among these new structures were summer kitchens, smoke houses, outdoor ovens, granaries, implement sheds, chicken coops and hog sheds. Throughout the Mennonite villages in MSTW, these outbuildings not only exhibited common designs, but were often placed in a similar position vis a vis the other farm buildings (Figure 52).

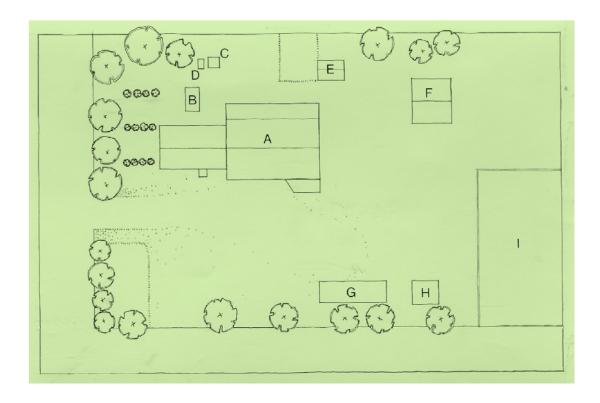


Figure 52

Typical Mennonite yard plan:

- A Main house/barn unit
- B Summer kitchen
- C Bake Oven
- D Smoke house
- E Chicken coop
- F Granary
 G Implement Shed
- H Hog barn
- I Cattle pen

Summer Kitchens

The "Somma Kjaeck", or summer kitchen, was one of the earliest outbuildings to appear in the farmyard. They were a common feature in the yards of the Mennonite villages in Russia and as soon as the Mennonites became established in Manitoba they began to appear here as well (Figure 53).

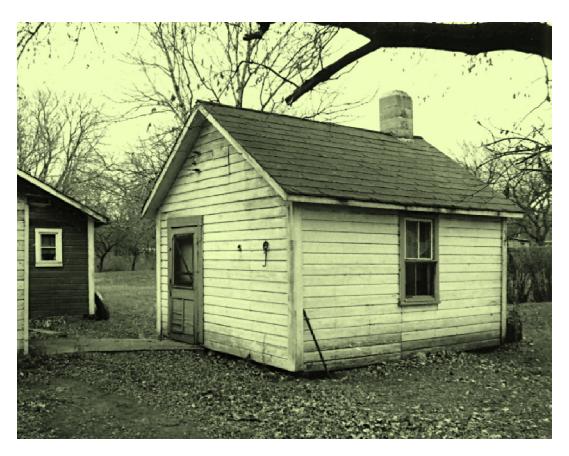


Figure 53

The "Somma Kjaeck" or summer kitchen, like this example in the Village of Schanzenfeld, was one of the earliest outbuildings to appear on the farmyard.

The traditional location for the "Somma Kjaeck" was across the yard facing the front of the house. Many of the Mennonites in the MSTW district, however, chose to locate it behind the house. This was only a short distance from the kitchen entrance and consequently a more convenient location.

The "Somma Kjaeck" actually served a variety of purposes. Its primary use was, naturally, for the preparation and cooking of family meals during the warm summer months. The transfer of food preparation out-of-doors allowed the house to remain comfortably cool and relatively free from insects. It was also used from time to time during the summer as a laundry room, a canning area, and often as an extra bedroom for the children. During the winter months it served as the storeroom for the winter's supply of cured and fresh meats which were hung from the ceiling and allowed to freeze.

The planning and construction of these buildings was straightforward. Because space was only needed for a stove, table, and a cupboard or two, the majority of summer kitchens were simple one-room gabled structures. Since most of the summer kitchens were not added to the farmstead until the 1890s, they were usually of frame lumber construction. None of the remaining "Somma Kjaecken" in the MSTW district are known to be of log construction. One in the Village of Osterwick, however, has a high, steeply-pitched roof. This suggests that it may once have had a thatch cover in which case the walls, now covered by siding, could well be of log (Figure 54).

In later years, some of the "Somma Kjaecken" were joined to the house with an enclosed hallway which often doubled as a dining area (Figure 55). A few had dining areas added to the rear of the structure.





Figure 54

Fehr residence and summer kitchen, Village of Osterwick.

Figure 55

Jacob Peters residence and attached summer kitchen, Village of Reinland.

Bake Ovens

The main brick oven in the house, by virtue of its design, gave off a great deal of heat. This was a welcome feature during the winter months, but it left the house uncomfortably hot during the summer when bread had to be baked. Therefore, as soon as the settlers became established, many of them constructed outdoor ovens commonly known as "Shtroo Hietens" (Figure 56). A common location was at the rear of the house, near the summer kitchen.



Figure 56
A typical Mennonite bake oven, in this case featuring a flat, rather than a vaulted top. (Blumenfeld: Where Land and People Meet, 1981)

The outdoor ovens often varied slightly in size and construction. Many were small vaulted roof structures about 1 x 2 metres in size and 1 metre high with a large cast iron door at the front. They were usually of brick construction over which a thick coating of mud plaster was applied to help retain the heat. A final coating of whitewash was often applied to protect the plaster from rain. In later years a few ovens were covered with small gable roofs for further protection from the elements.

The "Shtroo Hiet" was preheated using a variety of fuels, including straw, wood, and "Mest Sooden" or manure bricks. Once fired the brick-lined walls retained the heat for hours and could sometimes be used several times without having to be reheated. Bake ovens fell into disuse with the adoption of modern wood burning kitchen stoves after 1900 and by the 1950s had all but disappeared. Not a single example is known to still exist in the entire MSTW district. The only known location of a typical Mennonite "Shtroo Hiet" is a reconstruction, located at the Mennonite museum in Steinbach (Figure 57).



Figure 57
A reconstructed Mennonite bake oven.

Smoke Houses

Pork was the staple meat for many years, and every fall, shortly after freezeup, several families would combine their efforts and butcher a number of hogs for the winter's meat supply. Pork chops and roasts were pickled in salt brine or frozen outside. Other meats, such as hams and pork sausage, were usually smoked.

During this event, the men cleaned and cut the meat, made the various types of sausage, and smoked the meat. The women and children, in addition to providing meals, made the year's supply of lard by melting down the fat. They also cleaned the intestines for use as sausage casing and prepared the various cuts of meat, which were used in the making of headcheese. The daylong bee was also an important social event and was usually the occasion for storytelling and traditional song.

There were two types of facilities used for smoking the meat. As noted earlier, many of the homes had small smoke chambers built into the chimney above the kitchen where the curing was done.

These attic smokers, however, had a limited capacity, were inconveniently located, and required a great deal of time and heat to properly cure the meat. Thus, larger families found it more convenient to construct separate smoke houses or "Rajka Koma" outdoors. Because one or two of these generally served the needs of the whole village, they were not as common as bake ovens. The smoke houses that were built were generally located on the rear side of the house, or towards the back of the yard near the granaries.

There are at least three outdoor smoke houses still remaining in the MSTW district. The most interesting one is located in the Village of Hochfeld. Constructed of solid brick, it is 1.8 x 1.8 metres in size and stands 3.5 metres tall. Its pyramidal roof is constructed of lumber and sheathed with split shingles. Iron rods, upon which the meat was hung, were attached to the interior walls at various heights. To operate the smoker, various cuts of meat were hung at different levels, depending upon their size, and a slow fire kindled on the ground. The smoke was allowed to fill the structure, and eventually filter out the top. Access to the smoker was obtained through a large steel door at the front of the structure.

Another example in the village of Neuenburg is of similar size and design, but of wood frame construction. In this case the pyramidal roof is capped with a tall wooden chimney (Figure 58).

With modern methods of storage and easy access to commercial supplies of meat, the hog-butchering bee is no longer common. A few Mennonites continue the tradition, however, producing the same varieties of sausage that made the district famous for many years.



Figure 58
Wood frame smoke house
located on the P. Suderman
farmstead, Village of Neuenburg.

Wells

Although most Mennonite villages were located and oriented to take full advantage of the creeks that flowed through the district, domestic supplies of water were usually obtained from wells. Because of the close proximity of the Pembina Hills, the ground water table in most of the villages was near to the surface and the wells provided a reliable source of good quality water.

Initially, a single well, usually located at the end of the village street, served the needs of the entire village. But within a few years individual families began to construct their own wells. These early wells were dug by hand and cribbed with logs. Water was drawn by use of a long balance beam. One source suggests that crude wooden pumps were also used during the early years (Figure 59).

Many of the crib wells were later covered over with wooden platforms and roofs and water drawn with the use of a pulley and rope (Figure 60).

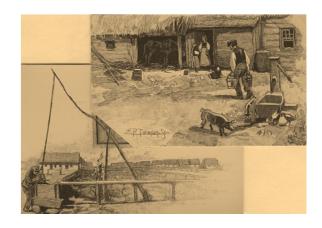


Figure 59
Many of the early wells made use of a balance beam for drawing water, a few settlers, however, constructed crude wooden pumps. (Provincial Archives Manitoba)

Around the turn of the century, many Mennonite families had new wells drilled and cast-iron hand pumps installed. A few of these later wells were connected to windmill-powered units for labour free operation. Hand pumps and crib wells were in general use until the early 1950s, when modern electric plumbing was installed in most of the homes. Although rarely used, a few of the early hand pumps can still be found in some of the villages.

The traditional location for the well was close to the front entrance of the barn. As a result of this, the barn had to be meticulously cleaned of manure every day to prevent seepage and contamination of the water. The fact that no cases of typhoid were ever reported in the West Reserve, suggests that this duty was rarely neglected. This apparently dangerous location nevertheless had its advantages. Many of the Mennonites enclosed the pump with small sheds attached on one side to the barn. The daily water supply could then be obtained without having to leave the main structure, something which was especially appreciated during the cold winter months.

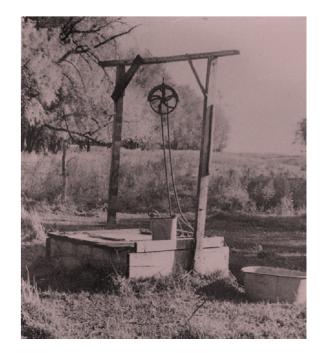


Figure 60
Crib-wells continued to be used after the turn of the century, often with the aid of a rope and pulley.
(Winkler, 1982: 161)

Granaries

During the first decades after settlement, when only small amounts of grain were produced, grain storage was easily accommodated within one or two rooms of the barn. Bagged grain was also often kept in the attic of the house, where it remained dry and acted as an insulator. With the dramatic increase of crop production during the 1890s, however, larger and more efficient storage facilities were soon required.

Like the summer kitchens, granaries were not uncommon in the Mennonite villages of Russia, and when a grain storage facility was required in Manitoba the Mennonites naturally turned to Russia for a model (Figure 61). The typical Mennonite granary or "Shpijka" had a square plan, a high, steeply pitched roof, and a central alleyway in line with the gable ridge of the roof. The large alley doors were generally of the same design as the "Sheen" doors on the barns.

The planning of these granaries was similar to that in granaries found in the English areas of MSTW. Both featured a central drive-through alleyway with two open-walled bins on either side. A team and wagon would be driven into the structure and bagged or loose grain transferred directly into or out of the bins. Many of the Mennonite granaries had a smaller door on each side of the main doors for easier access to the bins. The large area under the gable peak was often utilized for small equipment storage. Also many of the granaries had moveable wall sections which were placed across the alleyway and this space was then used as an extra grain storage area.

About a dozen of these granaries survive. One, located in the village of Reinland, provides a good illustration of the type of construction commonly use for these structures. It is 10×10 metres in size with 2 metre walls and is 6.2 metres high at the peak. The interior framework consists of 50×150 mm (2" x 6") studding and the walls area sheathed with horizontal "drop" siding (Figure 62).

The roof once had wooden shingles but it is now covered with modern asphalt roofing. Originally the structure stood on a small earthen mound to direct rainwater away from it, but it was recently placed on a concrete foundation.

After the turn of the century, mechanical grain augers were often used for handling loose grain, and the bins were filled through holes cut in the roof. While round metal granaries have become popular in recent years, at least eleven of the traditional granaries remain in the various villages of the MSTW district. Many of these are in good condition and are still in use.



Figure 61
J.F. Ens granary, Village of
Reinland. This example, like
most others in the MSTW district,
was constructed according to
traditional Mennonite designs.

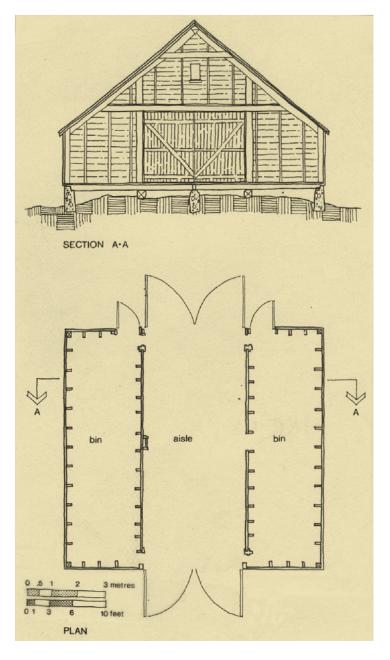


Figure 62Zacharias granary: section and plans.

Chicken Coops

Poultry production was an important facet of Mennonite pioneer life; chickens, turkeys, duck and geese could all be used for food, sale, or for feather tick bedding. During the early decades of settlement, most Mennonites kept chickens at least, and these flocks were normally housed in the main house/barn unit, usually in a small lean-to section towards the rear of the barn (Plate 133). In later years, however, individual buildings called "Heena Shtaulen" were constructed especially to house poultry (Figure 63).

Sometimes these structures were combined with facilities for hogs. A favourite location for chicken coops was at the far end of the yard behind the barn. Although not as common as they once were, several chicken coops are still being used in the Mennonite villages.

Like other outbuildings built by the Mennonites in the MSTW district, chicken coops were simple utilitarian structures. Most were one-roomed structures of frame construction with simple gable or shed-roofs. A few remaining examples also have an additional room for feed storage. Coops were clearly distinguished from other farm buildings by large window openings along the south or east side. Another feature common too many of the Mennonite coops was a large door which opened onto the feed room. Not generally found on chicken coops constructed in other areas of the province, these doors allowed convenient access to the building when large items like feed, hay, or crated chickens were carried in (Figure 64).



Figure 63

Jacob Peters chicken coop, Village of Reinland.



George Dyck chicken coop, Village of Neuenburg.

Machine Sheds

Farm equipment, like agricultural produce, was initially stored in the main house/barn structure. The rear lean-to portion of the barn, known to the Mennonites as the "Sheua", was the usual winter storage area for implements like mowers, ploughs and seeders. Items such as wagons and buggies were stored on the floor of the "Sheen" area or the alleyway of the granary. As the Mennonites began to purchase new or larger machinery during the 1890s, however, additional space was required and various types of machine sheds began to appear on many of the farmsteads.

Machine sheds constructed in the MSTW district were usually simple in design and construction and were not unlike the machine sheds constructed in many other parts of the province during this period. The nature of the equipment stored largely determined the design of the building. A shed in Reinland, for example, once housed a threshing machine. This can be determined by the high roof and large doors at the far end of the structure (Figure 65).

Many of the Mennonite machine sheds featured distinctive doors like those found on barns and granaries (Figure 66).



Figure 65

Ens machine shed, Village of Reinland.



Figure 66

E. Wahl machine shed, Village of Friedensruh.

Hog Barns

Given the Mennonite's wide use of pork as a meat staple, it would seem unusual that there are only a few remaining examples of hog barns. This was because few were constructed. During the early decades, hogs, like other livestock, were kept in the main barn structure. When farms diversified and expanded during the 1890s, larger facilities were generally not required for hogs, as they were raised simply for domestic use and only small numbers were kept at one time.

Some of the Mennonites did, however, construct separate hog barns. Like the chicken coops, they were generally simple, one-room frame structures, and were not unlike hog barns constructed in the English areas of the MSTW district. During the Mennonite exodus of the 1920s, a number of those who remained often purchased the homes of those who left and used them as hog sheds, or simply used the material from these homes to construct new facilities (Figure 67).

In recent years, several modern, large-scale hog operations have been established in the MSTW district. Consequently, few Mennonites continue to raise their own hogs, and the hog barn, like the house/barn unit and most other early farmstead buildings, has become a thing of the past. Those which survive are quickly disappearing.



Figure 67
After the turn of the century many early homes were converted for use as separate hog barns. This example has a small hatchway cut in the end wall.

Corn Dryers

Grain was the main agricultural product of the Mennonite settlements for over fifty years. Wheat and flax were generally grown for export, and oats for livestock feed. During the depression of the 1930s, however, production began to shift to a variety of speciality crops which were then being tested and developed at the Federal Department of Agriculture Experimental Farm near Morden. These crops included sugar beets, sunflower, rapeseed, potatoes and corn, which was one of the first new crops grown by the Mennonites.

When it was first introduced during the 1930s, corn was simply used for livestock fodder, but in 1937, a few of the more progressive Mennonite farmers began to grow seed corn. At the time this required the construction of a building in which to dry and de-cob the corn. Three of these facilities were constructed in the MSTW district. The first was built by A.A. Kroeker, a few kilometres south of Winkler in 1937; the other, near Haskett, was constructed by G.G. Elias two years later (Figure 68 and 69).

A third dryer was constructed during the 1940s close to the railroad tracks in Winkler but no longer exists. Both the Kroeker and Elias structures still exist, and while these buildings are of relatively recent construction, they are nevertheless worth some attention.

They were among the first of their type constructed in the province. The structures are of similar size and construction and were both designed for relatively labour free and fuel efficient operation (Figure 70).





Figure 68

A.A. Kroeker corn dryer, constructed in 1937.

Figure 69 G.G. Elias corn dryer, constructed in 1939.

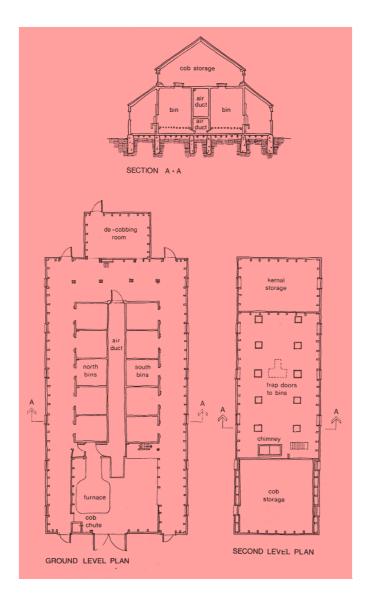


Figure 70
Elias corn dryer: plans and section.

In each case the corn was augured from ground level to a distribution unit at the top of the structure. Here it was directed into the various bins located along either side of a central duct system (Figure 71).

Hot air, supplied by a large furnace located at the rear of the structures, was forced into the ductwork and, before escaping through a chimney in the roof, was allowed to filter up through the bins, drying the corn. Once the cobs were sufficiently dry, the bins were emptied with the aid of conveyor belts. This carried the corn to a de-husking machine at the front of the building. From here the separated kernels were either augured into a waiting wagon or truck, or into a storage bin located in the attic at the front end of the structure.

Disposing of the empty cobs was neatly accomplished within the operation. The furnaces were fired up with coal, but once hot enough; the cobs could actually be used for fuel. Thus, from the de-husking machine the spent cobs were hauled to the rear of the building where they were either shovelled directly into the furnace, or augured into another storage bin in the attic above the furnace for later use (Figure 72).

The various mechanical functions in these corn dryers were driven by a complex, integrated system of belt and chain drives and powered by a single stationary engine.





Figure 71

Elias corn dryer: second storey detail showing the distribution box and bin hatches.

Figure 72

Elias corn dryer: detail of the ground floor showing the cob chute from the second storey storage area and the large furnace at the rear of the structure.