Uniform Construction Code (UCC)

Manufactured Homes (Single-Wide, Double-Wide & Modular Homes)

Building Permit Application Package

Per the Uniform Construction Code (UCC) the installation of all structures must comply with the standards of the *most recently adopted International Residential* Code. Copies of the International Residential Code (IRC) are available for purchase through the International Code Council by calling 1-888-IOC-SAFE or by visiting their website at www.iccsafe.org.

NOTICE

READ CAREFULLY BEFORE THE START OF CONSTRUCTION AND/OR INSTALLATION OF YOUR MANUFACTURED HOME

Please contact the McMillen Engineering, Inc. (724-439-8110 or 1-800-242-1244) to schedule inspections, per the Inspection Schedule and please be advised of the following:

- 1. All inspection fees must be paid prior to receiving the Building Permit.
- 2. The Building Permit must remain on the construction site at all times and the Inspector must sign off on the Building Permit at the time of the Inspection. If Building Permit is unavailable to sign off on, the Inspection will need to be rescheduled and a re-inspection fee will apply.
- 3. A *Certificate of Occupancy* cannot be issued without all required Inspector signatures.

1st INSPECTION:

 Pier foundations are required to have footings that are poured concrete and continue past the frost depth. Note that the height of the piers will be from the top of the footing to the frame of the home. The footings must be inspected BEFORE concrete is poured.

2nd INSPECTION:

Anchorage System and Electrical service

3rd INSPECTION:

- All accessory structures such as porches, landings, stairs, decks, awnings, and garages are <u>not permitted</u> to be attached.
- Exterior finished grade
- Skirting (per Municipal Ordinance)
- Rain water removal
- Porches and landings (3' x 3' minimum)
- Porch canopies
- Chassis is un-altered
- Steps for means of egress
- Hand rails and guard rails
- House number posted on hour or mailbox
- Bonding connecting sectional homes

Step-by-Step Process for Compliance with the Uniform Construction Code (UCC)

(For Mobile Homes, Double-Wide Mobile Homes and Modulars)

1. Submit an Application for Building Permit:

Submit completed application to McMillen Engineering, Inc. located at 115 Wayland Smith Drive, Uniontown, PA. Questions regarding applications call 724-439-8110 or 1-800-242-1244. PLEASE NOTE: Applications for mobile homes, modular homes and manufactured homes do not require a set of building plans to be submitted. The building permit fee must be paid at the time the Application is submitted.

2. Once the Building Permit Application is approved:

- Building Permit will be forwarded to the Applicant along with an Inspection Schedule
- Applicant will contact McMillen Engineering, Inc. to schedule all applicable inspections

General Manufactured Housing Information:

<u>http://community.newpa.com/housing-and-development/</u> (Then choose one of the options from the "Factory Built Housing / Buildings.")

Foundation Systems for Relocated Manufactured Housing http://www.phrc.psu.edu/Publications/Builder-Briefs

Installation Guide for Relocated Manufactured Homes http://community.newpa.com/library-files/installation guide_relocated_manufactured_homes-pdf/

Habitability Guidelines for Relocated Manufactured Homes http://community.newpa.com/library-files/habitability_guidelines_2013-pdf/

Anchoring. Alternate systems:

Vector system, OTI system: Must be approved by Manufacturer and their DANA, typically four systems per 76' sectional home.

Anchoring. Vertical tie downs:

Certain manufacturers provide vertical tie down straps along marriage wall or side walls on certain models. These tie downs must be attached to ground augers and be adjacent to piers. These vertical tie downs, if present are required regardless of anchoring system used.

Assembly:

- Joints between sections must be treated to limit air infiltration.
- Gaps ¾ or larger must be shimmed and fastener length increased.
- Floor to floor, wall to wall and roof to roof fastening varies. Typically screws 24"
 o.c., lags 32" o.c. Roof may be strapped.

Miscellaneous

Electrical:

Cross-over connections must not be exposed under the home.

Bonding wire (#8 bare copper wire) attaches to each chassis of sectional homes Flash rings required for exterior lights if fixture profile does not match junction box profile.

Plumbing:

Water supply cross-over connections must be inside the floor cavity to prevent freezing. DWV lines, supported from home every 4', sloped 1/4" per foot, uniform grade

Site grading:

Grade around perimeter of the home, graded, 1" per foot slope away from home for the first 6', 1'' per foot for the next 1'. No depressions under home.

Exterior:

- All shipping plastic must be removed.
- Vinyl siding overlap ≈1" to 1 ½ "
- Shingles at roof cap require underlayment.
- Bottom board material must be sound, any holes need patched.

<u>Decking</u>: Refer to the most recently adopted regulation for requirements.

HVAC:

Heat duct cross-over; if flex duct, must not rest on the ground, If through floor, must be gasketed or closed with metal sleeve, substantially air tight.

Fire place chimney, 3' above roof where is passes, 2' above any roof area within a 10' radius Cutting, altering, removing the frame (chassis) is not permitted.

Manufactured Home On-Site Completion Guide for Pennsylvania Certified Code Officials

Data Plate Information

Wind Zone I (Wind Zone II and DI generally not acceptable)

South Roof Load Zone (Middle and North Zones acceptable)
Comfort Heating Zone 3 (ZONES 1 & 2 ARE NOT ACCEPTABLE)

Serial Number (If "AC" is part of serial number, look for additional

inspection requirements)

Model Number Name of DAPLA

Manufacturers Certification Label Number(s) Cross reference these number(s) from data plate to the labels on the home.

Installation Manual:

Each Page and addendum pages must bear the DAPIA approval stamp. Also acceptable is the DAPIA stamp on the Table of Contents Page indicating all pages listed have been reviewed and approved. Cross reference the DAPIA approving the designs with the DAPIA listed on the data plate.

Support-Pier Set:

Generally openings in side wall and marriage wall 4' or larger require piers; includes patio doors, double hung windows, certain doors with side lights. Some manufacturers require piers for all entry doors. These areas will be identified with tags, paint or decals.

Main-Beam Piers:

Generally within 2' from each end, and spaced 8' apart. A single stack concrete block pier capacity is 8,000 #, up to 36" high. Piers higher than 36" require double blocks, interlocked. No mortar required for piers less than 80" high. Cap blocks must be full size (16 x 16 pier requires 16 x 16 cap block).

Hard wood shims in pairs.

Concrete Pier Footings, round:

Must be protected from frost (typically below frost line). For piers spaced 8' apart, footings should be 24" diameter, unless soil bearing capacity can be determined to be more than 1,500 lbs per square foot.

Concrete Pier Footings, runners:

Must be protected from frost (typically below frost line). For piers spaced 8' apart, runner should be 24" wide, unless soil bearing capacity can be determined to be more than 1,500 lbs per square foot.

Anchoring, Auger and Strap type:

- Within 2' of the end of the home
- Full depth
- Below frost line
- Above water table
- Stabilizing plates required (unless auger is in-line with the strap)
- Strap attached to top of I-Beam, completely wraps beam. 20°-45°
- Not embedded in concrete footing.

Commonwealth of Pennsylvania New Manufactured Home Installation Requirements

The Pennsylvania Manufactured Housing Improvement Act (Act 158 of 2004) requires that all new manufactured homes installed in the Commonwealth be subject to certain provisions of the law and regulations, all designed to assure proper installation 'and completion of every new manufactured home. Listed below are the key elements of the law that every homeowner, code official, retailer and installer should know:

- Every new manufactured home must be installed consistent with the manufacturers' approved designs and instructions for installation of the home.
- Code officials operating under the, Pennsylvania Uniform Construction Code, may not reject the manufacturers' approved designs or require review, approval or a seal by engineer or architect licensed in Pennsylvania.
- Persons wishing to install new manufactured housing must successfully complete one of the DCED-approved training courses and apply for certification by DCED as a "Manufactured Home Installer," Effective August 23, 2006
- A "Certificate of Compliance" must be completed by the above referenced installer and provided to the purchaser, code official and DCED. The code official may not issue an Occupancy Permit until a completed Certificate of Compliance form is received. Effective August 23, 2006
- No person may represent himself as a "manufactured home installer" or sign a Certificate of Compliance form, until such time as they receive written certification from DCED,
- If the retailer has not agreed to provide installation of the new manufactured home, prior to the execution of the sales documents the retailer must provide the purchaser with a written statement that outlines the Pennsylvania Manufactured Housing Installation program, and that the home must be installed consistent with the manufacturers' approved designs. The statement must also inform the purchaser that the Certificate of Compliance form must be completed by a certified installer. The retailer must then provide the purchaser with a list of certified installers.

This synopsis of the Pennsylvania New Manufactured Home Installation program is not intended to replace or restate the applicable laws or regulations, copies of which will be provided upon request.

McMillen Engineering, Inc. 115 Wayland Smith Drive Uniontown, PA 15401 724-439-8110 Phone 724-439-4733 Fax

Job Number	For Office Use Only Received by:	
	D-1	
	Date:	
Permit Number	Amount Paid:	
	Check #	

UNIFORM CONSTRUCTION CODE (UCC) BUILDING PERMIT APPLICATION - RESIDENTIAL

Location of Proposed Constructi	on or Improvement			
Street Address City	Zip Code	Township/Borough		
Parcel ID # (District, Map & Lot #)	Name of Subdivision (if applicable)	Lot Size (acres)		
Owner/Applicant Information				
Last Name	First Name	Daytime Phone #		
Mailing Address	City S	tate Zip		
Email Address:				
Tune of Improvement (Check ON	E Only)			
Type of Improvement (Check ON	e Only)			
Single-family home Two-family home Porch w/roof Porch roof ONLY	Single-wide mobile home On piers or foundation Double-wide mobile home on foundation Double-wide mobile home on piers Residential addition	on piers		
Garage (attached) Deck	Garage (detached) Interior renovations	Occupancy Permit ONLY		
Swimming pool Above-ground Alternative Energy (specify):	Swimming pool In-ground Swimming pool with deck	Other specify:		
Estimated Cost of Improvement (Fair Market Value) \$				
Contractor or Place of Durchage (fo	r Mobile Homes & Swimming De	olo)		
Contractor or Place of Purchase (fo	i Mobile Homes & Swimming For	JIS)		
Last Name First N	lame	Phone		
Street Address	City Si	tate Zip		

Building/Site Characteristics	
	Central Air
Heating type: Gas Electric	Oil Other Conditioning: Yes no
Water Service: Public	Private
Sewer Service: Public	Private Permit #
Fireplace(s): Yes	No If yes, how many? Type of fuel?
Building Dimensions	
Proposed building size or size of manu Existing building size (if proposed imprototal building size: Floodplain	
Is the site located within an identified flo If yes, will any portion of the flood hazard	(
Copy of zoning permit obtained Brownsville, North Union, Ger Zoning 724-430-1210	rman & Perry Townships- Fayette County Planning & enter- McMillen Engineering, Inc. Borough Vest Brownsville Borough
Conv of issued sewage permi	it- obtained from Municipal Authority or Sewage Officer

- <u>sewage permit</u>- obtained from Municipal Authority or Sewage Officer
- Copy of driveway permit (either issued by municipality of by PennDOT)
- Copy of approved stormwater plan, as per the adopted ordinance for municipality

These documents shall be submitted prior to review of the building permit application If your municipality does not have any of the regulations above, please note those below:

Please read the below statements prior to signing:

- 1. The Applicant certifies that all information on this application is correct and the work will be completed in accordance with the "approved" construction documents and PA ACT 45 (Uniform Construction Code) and any additional approved building code requirements adopted by the Municipality. The property owner and applicant assume the responsibility of locating all property lines, setback lines, easements, right of way, and flood areas. Issuance of a permit and approval of construction documents shall not be construed as authority to violate, cancel or set aside any provisions of the codes or ordinances of the Municipality or any other governing body. The applicant certifies he/she understands all the applicable codes, ordinances and regulations. Should it be determined that any of the information on this application be false, said application and/or building permit will become null & void.
- 2. CODE COMPLIANCE. The Uniform Construction Code, and the latest addition of the International Residential Code for One and Two Family Dwellings, with possible

modifications for Local Code Administrations, shall govern the construction under this application as well as any and all drawings/plans submitted with this Application. In the event of conflict between the design of the drawings /plans submitted and pertinent codes and regulations, the more stringent provisions shall govern construction.

- 3. No work may be concealed from view until it has been approved by McMillen Engineering Inspector. I fully understand that it is my responsibility to call for the inspections and that, if inspections are not made according to this procedure, I may be in violation of the UCC and may be subject to prosecution. The Building Code Official shall not accept an inspection from any inspector other than the approved Third Party Agency (it is illegal to accept the inspection(s) from those not approved/appointed by the Municipality). I am aware that any work not inspected or not corrected will be noted on the Final Inspection Certificate and Occupancy Permit.
- 4. The building permit must remain on the construction site at all times. If the Building Permit is unavailable for the Inspector to sign off on at the time of an inspection, said inspection will need to be rescheduled and a re-inspection fee will apply.

5. I also understand that no one may occupy the struct Certificate of Occupancy has been issued.	ure (or portion thereof) until a
Signature of Owner/Applicant/Contractor	

UNIFORM CONSTRUCTION CODE (UCC) BUILDING PLAN CHARACTERISTICS

Please provide the following information for your residential building project below or in a set of building plans.

<u>Please Note</u>: Under the Uniform Construction Code (UCC) all structures must be built per the standards of the currently adopted International Residential Code (IRC). Copies of the IRC are available for purchase through the International Code Council by calling 1-888-ICC-SAFE or by visiting their website at www.iccsafe.org.

Footer: S	Size: W _	in. x D	in	., Depth b	oelow gra	nde: in. (Conc. Streng	gth:	_ psi
	Reinforce	ement size:	No.:	Spac	ing:	in.			
Piers:	Туре	(CMU/Cond	c/other):		Size:	Depth:		Quantity	/:
	Reinforcement: No: Yes: Size: Spacing:								
	<u>Mobile</u>	Home / Mo	odular Home	only					
	No. of	Anchor stra	aps per side	:	_ No. of	Anchor strap	s at marriaç	ge wall:	
Foundati	on: T	ype (CMU/	Conc/other)	:			Wall thickne	ess:	in.
Walls:	Bas	ement /Cra	wlspace: _		Crav	vlspace Venti	ng: Size: _	sq in. N	lo of:
	Hei	ght of back	fill:						
Vapor Ba						ints overlapp	ed (yes/no):		
Framing:	Stu	d walls size):	spac	ing:				
	And	hor bolt dia	ı	spac	ing:				
	Exte	erior wall ty	pe: (other th	an wood))	Exte	erior Wall co	overing:	
	Floor Joists: Size: spacing:								
	Ceiling joists: Size: spacing:								
	Trus	sses or Raf	ters:		_ Rafte	er size:	sp	pacing:	in.
Roofing:	She	athing type	e:		_ thickne	ess:	in.		
Covering type: Venting type:									
R-Value:	Wal	lls: R			_ Roof/A	ttic: R			_
Windows	Size	es:				location:			_
Exterior Room Di	Doors: mension	Insulat s:	ed? Yes:		No: _		_		
(Approx.)									
Mechanical Improvements: Plumbing Improvements:									
Electrica	-								

CONTRACTOR / SUBCONTRACTOR INFORMATION

Architect/Engineer

Name	Address	Phone
General Contractor		
Name	Address	Phone
Excavation		
Name	Address	Phone
<u>Concrete</u>		
-		51
Name	Address	Phone
Carpentry		
Name	Address	Phone
	Address	THORE
<u>Electrical</u>		
Name	Address	Phone
<u>Plumbing</u>		
Name	Address	Phone
<u>Sewer</u>		
Name	Address	Phone
<u>Mechanical</u>		
Name	Address	Phone
Roofing		
Name	Address	Phone

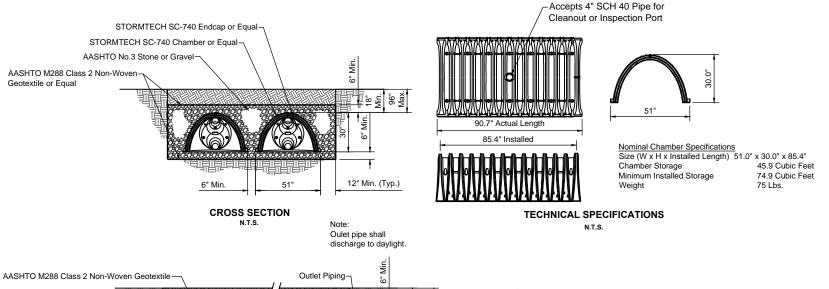
<u>Masonry</u>

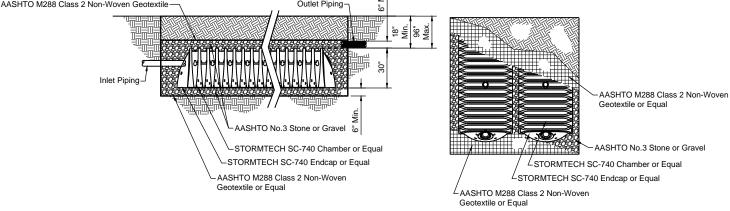
Name	Address	Phone	
<u>Drywall</u>			
Name	Address	Phone	
<u>Sprinkler</u>			
Name	Address	Phone	
<u>Paving</u>			
Name	Address	Phone	
Fire Alarm			
Name	Address	Phone	

STORMWATER APPLICATION RESIDENTIAL USE

Mailing Address:	
Phone: Address of development: Approved Use: Tax Map Parcel Number: Municipality: Other structures on property: Directions to site:	Email:
Ordinance adopted by the Munic Management System(s) to which construct the Stormwater Managed tails provided in the Stormwater Managed in the Manag	vledge that I have read the Stormwater Management ality and I have selected the Stormwater will construct for said development. I agree to lent System(s) in accordance with the construction Management Ordinance.
Stormwater Inf	tion chambers n / bioretention area
maintenance of the Stormwater Stormwater Management Systei	gnees/grantees shall be responsible for nagement System(s) selected and that such shall remain as a permanent fixture that cannot be ut prior written approval from the Municipality.
• • •	of the construction of the selected Stormwater act the Municipality for an inspection.
Signature of Landow	Date
Printed Name	

RETURN ORIGINAL TO THE MUNICIPALITY AND PROVIDE A COPY WITH THE BUILDING PERMIT APPLICATION.





PROFILE N.T.S.

PLAN VIEW N.T.S.

STORMWATER INFILTRATION CHAMBER DETAIL

GENERAL NOTES

- Stone placement between chambers rows and around perimeter must follow instructions as indicated in the most current version of STORMTECH's installation instructions.
- 2. Backfilling over the chambers must follow requirements as indicated in the most current version of STORMTECH's installation instructions.
- AASHTO M288 Class 2 Non-Woven Geotextile (Filter Fabric) must be used.
- The contractor must apply erosion and sediment control measures to protect the stormwater system during all phases of site construction per local codes and design engineer's specifications.
- 5. Contractor shall install (1) chamber per 500 sf of roof area for each lot.

Typical Rain Garden/Bioretention Area

A Rain Garden (Bioretention Area) is an excavated depression area on the surface of the Land in which native vegetation is planted to filter and use stormwater runoff. Runoff pond o top of the surface of the rain garden and then infiltrates into an enhanced soil/planting mix below the surface where plants can use the water to grow. Bioretention also improves water quality, vegetation filters the water, and the root systems encourage or promote infiltration. The picture above shows a cross-section of a typical rain garden. Key elements of rain garden include:

- Ponding depths recommended to 1 foot or less.
- Native vegetation that can tolerate dry and wet weather.
- An overflow area where, if the bioretention area were to overflow, the overflow would flow over pervious area (i.e. grass, meadow), and would not cause harm to property, or;
- An overflow such as a domed riser to allow excess flow from large storms to travel to other substantial infiltration areas or pervious areas.
- Maximum side slopes of: 1 are recommended, however, where space is limited, 2:1 side slopes may be acceptable with approval from the municipal engineer.
- The soil/planting mix depth should be between 1.5 feet to 6 feet deep.
- Provide a storage volume of 8 cubic feet for every 100 square feet of impervious surface, (roof, pavement, gravel, etc.) that drains to the Rain Garden. Assume void space of 10% in the Soil/Planting Mix.

Mulch with leaf compositeor shredded wood. Optional overflow drian. VARIABLE 12"x12" Atrium Grate, Existing Surface-National Diversified Sales, Inc. or equal 12"x12" Adapter with 8" Outlet Existing Subgrade -Pipe Bell -8" P.V.C. Sch. 40 -Coupler (from smooth wall to corrugated) 5 45° Corrugated Bend -12" C.P.P. HQ ∠Soil backfill mixture Note: 30% Organic material (such as compost) Outlet pipe shall 70% Topsoil (all rocks and foreign matter discharge to daylight. -Existing Subgrade must be removed) **TYPICAL RAIN GARDEN PROFILE** N.T.S. Mulch with Leaf Composite or Shredded Wood VARIABLE Existing Surface -**GENERAL NOTES** Excavate rain garden area to depth of 3'-2" and scarify the existing soil surfaces. Do not compact existing surface. 2. Backfill rain garden with soil mixture, overfill to allowfor settlement. Light hand tamping is acceptable if necessary. Existing Subgrade-Presoak soil to aid in settlement, then complete grading to specified depth and add a layer of mulch. SOIL BACKFILL MIXTURE Rain garden area shall be vegetated with native floodplain plant 30% ORGANIC MATERIAL (SUCH AS COMPOST) 70% TOPSOIL (ALL ROCKS AND FOREIGN species. MATTER MUST BE REMOVED) Contractor shall install rain garden with a volume of 1,110 CU.FT. per acre of lot area. Soil Backfill Mixture Existing Subgrade -TYPICAL RAIN GARDEN CROSS SECTION 30% Organic Material (Such as Compost) N.T.S. 70% Topsoil (All Rocks and Foreign Matter Must be Removed)

Note:

If overflow drain is not used, all overflow must be directed away from houses and adjacent properties.

Dry Well / Seepage Pit

A dry well (or Seepage Pit) is a subsurface storage facility that temporarily stores and infiltrates runoff from the roofs of buildings or other impervious surfaces. A dry well can be either an excavated pit filled with stone fill, or a structural prefabricated chamber, (see illustration below). Dry wells discharge the stored runoff via infiltration into the surrounding or underlying soils. An overflow mechanism (surcharge pipe, connection to larger infiltration area, etc.) will ensure that additional runoff is safely conveyed downstream. Key elements of a Dry Well include:

- Facilities should be located a minimum of ten (10) feet from building foundations.
- Construction of a dry well should be performed after surface soils in all other areas of the site are stabilized to avoid clogging.
- During construction, compaction of the subgrade soil in the bottom of the dry well should be avoided, and construction should be performed only with light machinery.
- Gravel fill should consist of stone with an average of 1-1/2 to 3 inches in diameter with the gravel fill wrapped in a nonwoven geotextile that separates the stone fill from the surrounding soil.
- At least 12 inches of soil needs to be placed over the top of the dry well.
- At least one observation well / cleanout is recommended
- Infiltration testing is recommended to ensure the underlying soil is capable of infiltrating the needed volume of the needed volume of stormwater. If positive infiltration is not available than another control method must be utilized.
- Maintenance will require periodic removal of sediment and leaves from sumps and cleanouts.
- Dry wells shall provide a storage volume of 8 cubic feet for every 100 square feet of impervious surface (roof, pavement, gravel, etc.) that drains to it.

Refer to the following illustration of a typical seepage pit. Additional information is available in the Pennsylvania Stormwater Best Management Practices Manual.

