



Residential Swimming Pool – Miscellaneous Permit Requirements

FOR CONTRACTORS APPLYING ONLINE

Once approved, items with an asterisk (*) must be printed at scale and made available on the job site by the time of first inspection.

- Notice of Commencement or Affidavit of Notice of Commencement Filing
Only if over \$5,000.00 (Recorded and Certified copy not required until first inspection)
- Copy of recorded deed or Property Appraiser scan showing proof of ownership (if owner does not match the ownership information listed on the Property Appraiser)

As applicable to project scope:

- Flagler County Residential Tree Protection and Landscape Compliance
- Affidavit of Drainage Control
- Residential Safety Swimming Pool Safety Act form
- (*) Signed and Sealed Site Plan illustrating the existing and proposed grading per 98-03
- (*) Survey showing proposed location of pool and all existing structures
- (*) Existing septic tank and drain field location (can be added to site plan)
- (*) Two sets of signed and sealed swimming pool construction drawings

In lieu of manually signing and sealing plans, design professionals shall affix digital signatures in compliance with Florida Statutes Chapter 481 and Florida Administrative Rule 61G1-16.005 for architects or Florida Statutes Chapter 471 and Florida Administrative Rule 61G15-23.003 for Engineers. Digital signatures must be original and will be verified. Do not upload scanned/copied plans, they will not be accepted. The following statement must accompany a digital signature "This item has been electronically signed and sealed by (name) on (date) using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies". A digitally created image of the seal must be on the plans for printing purposes.

Plans

1. Each page must contain the digital signature and will require individual upload for each sheet/page.

***** THIS LIST IS INTENDED ONLY AS A GUIDE LINE FOR APPLICATION SUBMITTAL AND MAY OR MAY NOT BE ALL INCLUSIVE*****

It is the applicant's responsibility to produce Notice of Commencement as specified in Florida Statute Chapter 713.13. prior to the scheduling of inspections. All inspections must be complete to close out the permit when the project is complete. Failure to close out permits may result in additional fees and/or suspension of rights to obtain additional permits.

2. Must be drawn and formatted for a minimum landscape 24" x 36" sheet or 11" x 17" for smaller scale jobs.
3. Are to be submitted in a pdf format only.
4. Each page must have title block to contain the address of the subject property.
5. Plans shall be uploaded properly oriented in landscape mode.
6. Must be drawn to scale
7. Each page of the plans must have a graphic scale.
8. Plans that are digitally signed and sealed cannot be locked (password protected).
9. Plans must include a digitally created image of the seal along with the digital signature and seal (For printing purposes).

Documents

1. Documents must be submitted in pdf format only.
2. Documents shall be submitted in portrait orientation (unless created in landscape mode)

File Naming Convention

Plans

1. Plans are to be **submitted / uploaded as single page files** (do not combine files) and named according to the name of the page. Example: A.1 M.1 E.4 S.2. If the page does not have a naming convention (blank or named 1, 2, 3, 4) please use a description for the name for quick and easy identification. Example: Floor Plan, Elevations, Wall Sections, Pool Plans, etc. **Do NOT add any verbiage in front of the file name- you may add additional verbiage as a suffix.** Identifiers may be the suffix but not used as a prefix.
2. Revisions/ corrections are to be named the SAME NAME as the original document.

Documents

This applies to all documents submitted online, regardless of the phase of the permit (apply, revisions, corrections, supporting documents, etc.)

Documents are to be submitted individually and ***named as identified below***. If a document contains multiple pages, it may be uploaded as a single file. (i.e., energy calculations, etc.)

File names should be named in the examples below: (identifiers only as a suffix)

- Boundary survey
- Early power affidavit
- Electrical Calculations
- Elevation certificate
- Energy calculations
- Final Survey
- Foundation Survey

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- Landscape plan
- Lot grading plan
- Manufacturer specifications
- Notice of commencement
- Owner disclosure
- Plumbing riser diagram
- Pool calculations
- Product approval
- Proof of ownership
- Recorded warranty deed
- Roof affidavit
- Roofing worksheet
- Septic Tank Permit
- Sewer Receipt
- Site plan
- Shop drawings
- Specification manual
- TDH
- Tenant affidavit
- Topographic survey
- Tree survey
- Tree Protection and Landscape Compliance form
- Truss layout
- Water receipt
- Well permit

General Information

1. Permits utilizing the electronic plan review system must maintain the electronic process throughout the permit application review process. (and vice versa if submitted manually)
2. You may utilize this system to upload and maintain your documents at the packet stage up to 30 days prior to choosing to submit.
3. Your packet will expire in 30 days if you do not choose to submit and will require you to start again when you are ready.
4. Once you submit, if the package is incomplete, you will receive any email outlining the deficiencies and the package will not be accepted.
5. Revisions/corrections cannot be uploaded while reviews are being processed. Once all of the reviews have been completed, you will be able to upload any new plans/documents. The red SUBMIT button must be clicked for your documents to reach us. A revision sheet is not required for upload, one will automatically be generated when you hit SUBMIT.

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6. Revisions are to be named the SAME NAME as the original document.
7. When the reviews have been completed, you will receive an email notifying you the permit is ready for issuance.
8. Payments continue to be made online or in person.
9. Job/Inspection card, permit, plans, etc. can be downloaded from the portal.
10. Approved plans are to be at the job site for the inspector.
11. Inspections may be requested through the portal.
12. The certificate of occupancy is also available for print online upon issuance.

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AFFIDAVIT OF NOTICE OF COMMENCEMENT FILING

I, _____, of
(Owner's Name)

(Street Address)

(City, State and Zip)

hereby certify the attached is a copy of the Notice of Commencement that is being filed with the Clerk of the Circuit Court for the improvement as noted:

(Please specify the improvement/work)

as permitted by Flagler County Building Department.

(Owner's or Contractor's Signature)

(Date)

State of _____

County of _____

Sworn and subscribed before me this _____ day of _____, 20____

who is personally known to me or produced: _____

as identification.

(Notary Public Signature)

(Seal)

(Printed or Typed Name of Notary)

My Commission Expires: _____



Permit Number: _____

Flagler County
Residential Tree Protection and Landscape Compliance
(For a New Residential Structure)
Page 1 of 2

A tree survey is required and shall include at a minimum a description of the species, size, quantity and location of all trees and depiction of the site including proposed structures and vehicle use areas. Tree survey shall be prepared by a Florida licensed land surveyor.

I, _____, the undersigned, certify that
Print or Type Name(s)

I am the owner or duly appointed agent for the property described below:

 Property Street Address

 Parcel Number

I Residential Tree Protection Compliance LDC, §6.01.03

Index tree protection/replacement requirements:

Each single-family residential lot must preserve or replant at least forty (40) percent of the total pre-development caliper inches existing on the site.

- Where replacement trees are required to be planted in order to maintain the minimum number of caliper inches, they shall be from the index tree list, have a minimum caliper of two and one-half (2 ½) inches measured six (6) inches above grade after planting and be Florida Grade #1 or better.

INDEX TREE: A Tree (listed below) having a caliper of 6 inches or greater.

Flagler County Protected Index Trees					
Predevelopment Tree Caliper Inches (TCI):			40% of Predevelopment TCI:		
Total Caliper Inches Post Development:			<i>Minimum replacement tree size 2 ½" diameter, 6" above grade</i>		
Common Name	Number of Trees Provided	Caliper Inches	Common Name	Number of Trees Provided	Caliper Inches
Example:			Magnolia, Southern *		
Elm	3	6", 6", 10"	Magnolia, Sweetbay*		
Ash*			Maple, Red*		
Bay			Oak*		
Black Cherry			Persimmon		
Cherry Laurel			Redbud, Eastern		
Cypress, bald			Red Cedar, Eastern		
Cypress, pond			Red Cedar, Southern*		
Devil's Walking Stick			Sweetgum*		
Elm*			Sycamore, American*		
Hackberry			Tupelo, Black		
Hickory*			Tupelo, Swamp		
Holly			Yellow-Poplar (Tulip tree)		
Totals:			Totals:		

Flagler County
Residential Tree Protection and Landscape Compliance
(For a New Residential Structure)
PAGE 2 of 2

II

Residential Landscape Compliance, LDC §5.01.04(3)

Each single-family lot must provide at least one (1) tree per three thousand (3,000) square feet of lot area for first quarter (1/4) acre of lot area. For lots exceeding one-quarter (1/4) acre, one (1) tree for every additional one-quarter (1/4) acre, or major fraction thereof shall be planted. (i.e.) Four (4) trees required for the first 10,890 sq. ft. and one more tree for every 10,890 sq. ft, or major fraction, thereafter.

- When trees are planted to meet the minimum requirement they must be shade trees (see list above with *), have a minimum caliper of one and one-half (1 1/2) inches measured at four and one-half (4 1/2) feet aboveground at the time of planting.
- Existing shade trees, sabal palms and pine trees may be used to satisfy this requirement, in whole or in part, provided that they have a minimum caliper of two and one-half (2-1/2) inches and overall height of ten (10) feet.

Other trees as may be allowed by the County Planner and State Forester.

<u>Flagler County Shade Trees to be planted</u>	
Square Foot of Lot:	Number of Trees Required:
<u>Common Name of Tree</u>	<u>Number of Trees Planted</u>
Total:	

III

Please initial the following Statement if no Protected Index Trees over 6 inches in caliper exist on the property.

_____ I certify that no protected index trees exist on the above-described property for which a building permit is sought.

IV

Please initial the following Statement if no Trees will be removed from the property.

_____ I certify that no trees will be removed on the above-described property for which a building permit is sought.

V

Please sign below to certify that the above information is true and accurate.

 Owner/Agent Signature

 Date



FLAGLER COUNTY
AFFIDAVIT OF DRAINAGE CONTROL FOR
RESIDENTIAL AND MINOR COMMERCIAL CONSTRUCTION

Building Permit Number:
(OFFICE USE ONLY)

A. OWNER/SITE INFORMATION:

Name of Owner: Phone Number:
Address:
Subdivision Name: Lot Number of Site:
Tax Parcel Number: Section: Township: Range:

B. CERTIFICATE OF COMPLIANCE:

The undersigned owner of the above-described property hereby certifies that development of the above property will not result in:

- 1. Flooding of adjacent lands.
2. Blockage of existing drainage systems, natural or manmade.
3. The destruction of existing drainage systems, natural or manmade.
4. Erosion of fill or disturbed materials onto adjacent lands or environmentally sensitive areas (as determined by Flagler County).
5. The destruction of roadside drainage swales, roadway pavement and/or shoulders.
6. Flooding of the proposed structure during a 100-year frequency storm.
7. Construction to an elevation less than that required by the Flagler County Land Development Code. (Applicant is cautioned UNAUTHORIZED construction may be subject to demolition).
8. Inadequate onsite drainage in the vicinity of the proposed structure.
9. Deviation from the approved grading plan for this property.

C. RELEASE AND AUTHORIZATION:

- 1. The undersigned hereby release and holds harmless the County of Flagler and its authorized agents and/or employees from any and all claims of damage of every kind and nature whatsoever to said property, or contiguous properties, arising from the approval of this application or construction of required improvements.
2. The undersigned hereby grants unto authorized agents and/or employees of the County of Flagler the right to enter upon said property for inspection and enforcement activities. Flagler County reserves the right to require the property owner to implement reasonable measures regarding drainage control including, but not limited to, submittal of signed and sealed engineering drainage plans.

(Signature) (Printed Name)

State of
County of

Sworn to and Subscribed before me, the Day of, 20 by
who is personally known to me or has produced
as identification.

(Type of Identification)

Signature of Notary Public

Print, Type or Stamp of Notary

Permit # _____



Residential Swimming Pool, Spa and Hot Tub Safety Act

Notice of Requirements

I (We) acknowledge that a new swimming pool, spa or hot tub will be constructed or installed at (Street Address) _____, and hereby that one of the following methods will be used to meet the requirements of Chapter 515, Florida Statutes.

(PLEASE INITIAL ALL OF THE METHOD(S) TO BE USED FOR YOUR POOL)

____ The pool will be isolated from access to the home by an enclosure that meets the pool barrier requirements of Florida Statue 515.29;

____ The pool will be equipped with an approved safety pool cover that complies with ASTM F1346-91 (Standard Performance Specifications for Safety Covers for Swimming Pools, Spas and Hot Tubs);

____ All doors and windows providing direct access from the home to the pool shall be equipped with an exit alarm complying with UL2017 and has a minimum sound pressure rating of 85 decibels at 10 feet;

____ All doors providing direct access from the home to the pool shall be equipped with self-closing, self-latching devices with release mechanisms placed no lower than 54” above the floor or deck;

____ A swimming pool alarm that, when placed in a pool, sounds an alarm upon detection of an accidental or unauthorized entrance into the water. Such pool alarm shall meet and be independently certified to ASTM Standards F2208, titled “Standard Safety Specification for Residential Pool Alarms.

I understand that not having one of the above safety devices, installed at the time of final inspection, or when the pool is completed for contract purposes, will constitute a violation of Chapter 515m, F.S. and will be considered as committing a misdemeanor of the second degree, punishable by fines up to \$500 and/or up to 60 days in jail as established in Chapter 775, F.S.

Contractor’s Signature

Date

Contractor’s Name (Please Print)

Owner’s Signature

Date

Owner’s Name (Please Print)



**Flagler County Growth Management
Building Services Division**

1769 East Moody Blvd
Bldg 2, Bunnell, FL 32110
386-313-4003

NOTICE OF COMMENCEMENT

PERMIT NUM _____

TAX FOLIO NUM _____

STATE OF FLORIDA
COUNTY OF FLAGLER

THE UNDERSIGNED HEREBY GIVES NOTICE THAT IMPROVEMENT WILL BE MADE TO CERTAIN REAL PROPERTY AND, IN ACCORDANCE WITH CHAPTER 713, FLORIDA STATUTES, THE FOLLOWING INFORMATION IS PROVIDED IN THIS NOTICE OF COMMENCEMENT.

DESCRIPTION OF PROPERTY	_____
DESCRIPTION OF IMPROVEMENT	_____

OWNER INFORMATION OR LESSEE INFORMATION IF THE LESSEE CONTRACTED FOR IMPROVEMENT

NAME	_____	INTEREST IN PROPERTY	_____
ADDRESS	_____		
NAME AND ADDRESS OF FEE SIMPLE TITLEHOLDER - (IF OTHER THAN OWNER)	_____		

CONTRACTOR NAME	_____	PHONE	_____
ADDRESS	_____		

SURETY NAME	_____	PHONE	_____
ADDRESS	_____	BOND AMOUNT	_____

LENDER NAME	_____	PHONE	_____
ADDRESS	_____		

PERSONS WITHIN THE STATE OF FLORIDA DESIGNATED BY OWNER UPON WHOM NOTICES OR OTHER DOCUMENTS MAY BE SERVED AS PROVIDED BY SECTION 713.13(1)(A)7., FLORIDA STATUTES

NAME	_____	PHONE	_____
ADDRESS	_____		

IN ADDITION TO HIM/HERSELF, OWNER DESIGNATES THE FOLLOWING PERSON(S) TO RECEIVE A COPY OF THE LIENOR'S NOTICE AS PROVIDED IN SECTION 713.13(1)(B), FLORIDA STATUTES

NAME	_____	PHONE	_____
ADDRESS	_____		

EXPIRATION DATE OF NOTICE OF COMMENCEMENT

THE EXPIRATION DATE IS 1 YEAR FROM THE DATE OF RECORDING UNLESS A DIFFERENT DATE IS SPECIFIED HERE: _____

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

SIGNATURE OF OWNER OR LESSEE, OR OWNER'S OR LESSEE'S AUTHORIZED OFFICER/DIRECTOR/PARTNER/MANAGER

SIGNATORY'S TITLE / OFFICE

STATE OF FLORIDA COUNTY OF FLAGLER

THE FOREGOING INSTRUMENT WAS ACKNOWLEDGED BEFORE ME, BY MEANS OF PHYSICAL PRESENCE OR ONLINE NOTARIZATION,

THIS _____ DAY OF _____, _____, BY _____
YEAR NAME OF AFFIANT

PERSONALLY KNOWN _____ OR PRODUCED IDENTIFICATION _____

SIGNATURE OF NOTARY PUBLIC STATE OF FLORIDA

PRINT, TYPE OR STAMPED COMMISSIONED NAME OF NOTARY PUBLIC

Swimming Pool Energy Efficiency Compliance Information

NOTE: These Requirements Apply ONLY to the Filtration Pump

ANSI/SPSP/ICC-15 2011

Flow Calculations

Pool water volume _____ + 360 = _____ gpm - this is the calculated flow rate.

Note: for pools under 13,000 gals. The calculated flow rate or 36 gpm whichever is greater = the filtration flow rate

If there is an Auxillary load on the filtration pump? Yes _____ No _____

If so, what is the calculated auxillary flow rate _____ gpm

Flow Rate (low speed) _____ gpm @ _____ rpm.

Minimum suction side pipe size @ 6 fps _____ in. Minimum suction side branch pipe size @ 6 fps _____ in.

Minimum suction side pipe size @ 6 fps _____ in. Minimum suction side branch pipe size @ 6 fps _____ in.

Determine Filter Size:

Filter Factors (GPM/SF)	Cartridge (0.375)	DE (2.0)	Sand (15)
Filter Size: _____ / _____ = _____			
(Flow Rate)	(Filter Fact)	Filter Size	(Filter Make and Model)

Pump Controls

Filtration pump has no auxillary load – standard time clock _____
 Filtration pump with auxillary load – Control model for low speed default within 24 hr. _____

Heater Model

Gas Heater efficiency rating _____ (No Pilot Light)
 Heat Pump efficiency C.O.P. _____

ANSI 5 & ANSI 7 Compliance Work Sheet

Determine Simplified TDH:

1. Distance from pool to pump in feet _____
 2. Fiction loss (in suction pipe) in _____ inch pipe per 1 ft. @ _____ gpm = _____ (from pipe flow/friction loss chart)
 3. Fiction loss (in suction pipe) in _____ inch pipe per 1 ft. @ _____ gpm = _____ (from pipe flow/friction loss chart)
- TDH in Piping _____

Determine Simplified TDH:

4. _____ x _____ = _____
 (Length of Suct. Pipe) (Ft of head/1 ft. of Pipe) (TDH Suct. Pipe)
 5. _____ x _____ = _____
 (Length of Return Pipe) (Ft of head/1 ft. of Pipe) (TDH Suct. Pipe)
- Filter/Heater loss in TDH _____
- All other losses _____
- Total Dynamic Head (TDH): _____

Determine Pipe Sizes:

Branch Piping to be _____ inch to keep velocity @ 6 fps max. at _____ gpm System Flow Rate.
 Trunk, Skimmer &
 Suction Piping to be _____ inch to keep velocity @ _____ fps max. at _____ gpm System Flow Rate.
 Return Piping to be _____ inch to keep velocity @ _____ fps max. at _____ gpm System Flow Rate

Pump Selection as Listed on Curve A or C (circle one)

Filtration pump _____ Maximum Flow Rate _____ gpm

Main Drain Cover _____
(Make and Model)

Determine the Number and Type of Required In-Floor Suction Outlets:

Check all that apply.

 2 _____ suction outlets @ _____ gpm max. flow

 3 _____ suction outlets @ _____ gpm max. flow

 _____ channel drain @ _____ gpm w/ _____ ports

Flow and Friction Loss Per Foot Schedule 40 PVC Pipe						
Pipe Size	Velocity - Feet Per Second					
	6 fps		8 fps		10 fps	
1"	16 gpm	0.14'	21 gpm	0.23'	28 gpm	0.35'
1.5"	37 gpm	0.08'	50 gpm	0.14'	62 gpm	0.21'
2"	62 gpm	0.06'	82 gpm	0.10'	103 gpm	0.16'
2.5"	88 gpm	0.05'	117 gpm	0.09'	146 gpm	0.13'
3"	136 gpm	0.04'	181 gpm	0.07'	227 gpm	0.10'
4"	234 gpm	0.03'	313 gpm	0.05'	392 gpm	0.07'
6"	534 gpm	0.02'	712 gpm	0.03'		

TDH Calculation Options
For each pump

Check one.

Simplified Total Dynamic Head (STDH)
Complete STDH Worksheet - Fill in all blanks

Total Dynamic Head (TDH)
Complete Program or other calcs. Fill in required blanks on worksheet & attach calculations.

Maximum Flow Capacity
Of the new or replacement pump.

_____ Date

_____ Contractor Signature

_____ Contractor Cert. No.

_____ Contractor Telephone No.

OWNER

Scale: None

Total Head In Feet Conversion Chart

Inches Mercury (Vacuum Gauge)

		0	2	4	6	8	10	12	14	16	18
PSI (Pressure Gauge)	0	0.0	2.3	4.5	6.8	9.0	11.3	13.6	15.8	18.1	20.3
	1	2.3	4.6	6.8	9.1	11.4	13.6	15.9	18.1	20.4	22.7
	2	4.6	6.9	9.1	11.4	13.7	15.9	18.2	20.4	22.7	25.0
	3	6.9	9.2	11.5	13.7	16.0	18.2	20.5	22.8	25.0	27.3
	4	9.2	11.5	13.8	16.0	18.3	20.5	22.8	25.1	27.3	29.6
	5	11.5	13.8	16.1	18.3	20.6	22.8	25.1	27.4	29.6	31.9
	6	13.9	16.1	18.4	20.6	22.9	25.2	27.4	29.7	31.9	34.2
	7	16.2	18.4	20.7	23.0	25.2	27.5	29.7	32.0	34.3	36.5
	8	18.5	20.7	23.0	25.3	27.5	29.8	32.0	34.3	36.6	38.8
	9	20.8	23.1	25.3	27.6	29.8	32.1	34.3	36.6	38.9	41.1
	10	23.1	25.4	27.6	29.9	32.1	34.4	36.7	38.9	41.2	43.4
	11	25.4	27.7	29.9	32.2	34.5	36.7	39.0	41.2	43.5	45.8
	12	27.7	30.0	32.2	34.5	36.8	39.0	41.3	43.5	45.8	48.1
	13	30.0	32.3	34.5	36.8	39.1	41.3	43.6	45.9	48.1	50.4
	14	32.3	34.6	36.9	39.1	41.4	43.6	45.9	48.2	50.4	52.7
	15	34.6	36.9	39.2	41.4	43.7	45.9	48.2	50.5	52.7	55.0
	16	37.0	39.2	41.5	43.7	46.0	48.3	50.5	52.8	55.0	57.3
	17	39.3	41.5	43.8	46.1	48.3	50.6	52.8	55.1	57.4	59.6
	18	41.6	43.8	46.1	48.4	50.6	52.9	55.1	57.4	59.7	61.9
	19	43.9	46.2	48.4	50.7	52.9	55.2	57.4	59.7	62.0	64.2
	20	46.2	48.5	50.7	53.0	55.2	57.5	59.8	62.0	64.3	66.5
	21	48.5	50.8	53.0	55.3	57.6	59.8	62.1	64.3	66.6	68.9
	22	50.8	53.1	55.3	57.5	59.9	62.1	64.4	66.6	68.9	71.2
	23	53.1	55.4	57.7	59.9	62.2	64.4	66.7	69.0	71.2	73.5
	24	55.4	57.7	60.0	62.2	64.5	66.7	69.0	71.3	73.5	75.8
	25	57.8	60.0	62.3	64.5	66.8	69.1	71.3	73.6	75.8	78.1
	26	60.1	62.3	64.6	68.8	69.1	71.4	73.6	75.9	78.1	80.4
	27	62.4	64.6	66.9	69.2	71.4	73.7	75.9	78.2	80.5	82.7
	28	64.7	66.9	69.2	71.5	73.7	76.0	78.2	80.5	82.8	85.0
	29	67.0	69.3	71.5	73.8	76.0	78.3	80.5	82.8	85.1	87.3
	30	69.3	71.6	73.8	76.1	78.3	80.6	82.9	85.1	87.4	89.6
	31	71.6	73.9	76.1	78.4	80.7	82.9	85.2	87.4	89.7	92.0
	32	73.9	76.2	78.4	80.7	83.0	85.2	87.5	89.7	92.0	94.3
	33	76.2	78.5	80.7	83.0	85.3	87.5	89.8	92.0	94.3	96.6
	34	78.5	80.8	83.1	85.3	87.6	89.8	92.1	94.4	96.6	98.9
35	80.9	83.1	85.4	87.6	89.9	92.2	94.4	96.7	98.9	101.2	